

**Rules Defining the Duties and Responsibilities
of the Various Gazetted and Non-Gazetted
Public Health Officials.**

*Approved by the Revenue Department and sanctioned by
H.E.H. the Nizam's Government in the Army and
Medical Department Resolution No. 7
dated 22nd of Kharrdad 1345 Fashi.*

H.E.H. the Nizam's Medical and Public Health Dept

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Copy of Resolution No. 7
dated 22nd Khurdad 1345
Fasli of the Office of
Military and Medical
Secretariat.

Subject:—Rules and Regulations
defining the duties of
the officers and subordinates
of the Public Health Department.

READ:—

(1) Medical and Public
Health Department letters
No. 741 dated 25th Shehrewar
1344 F. and No. 3310 dated
10th Farwardi 1345 F. with
the draft rules.

(2) Revenue Secretariat
letter No. 1088 dated 22nd
Farwardi 1345 F.

(3) Military and Medical
Secretariat Guzarishes No. 450
dated 17th Farwardi 1345 F.

نقل در روز یوس شکر - معتمدی فرج

و حجت سرکاری

نشان

رقع ۲۲ - خوردد ۲۵ - ۱۳۴۵ ف

مقدمه

تعیین نمود عده عده دران و ماتحنین

سررشدت صحت عامه سرکاری

کافذت دیال میس و لاندت ہوے :-

(۱) مر اسد معتمدی صحت و

صحت عامه سرکاری نشان (۱۳۴۵ -)

مورخه ۲۵ - شهر یاورس ۱۳۴۵ ف و

نشان (۱۳۴۵ -) مورخه ۱۰ - فروردی

۱۳۴۵ ف مع مسوده قواعد -

(۲) مر اسد معتمدی باگزارای سرکاری

نشان (۱۳۴۵ -) مورخه ۲۲ - فروردی

۱۳۴۵ ف -

(۳) گذارشات محکمہ معتمدی فوج

و طبابت سرکاری نشان (۱۳۴۵ -)

Duties, Powers and Responsibilities of the Director, Medical and Public Health Department, His Exalted Highness the Nizam's Government.

1. The Director of Medical and Public Health Department is the Administrative Head of the Public Health Department of His Exalted Highness the Nizam's Dominions and will be the adviser to Government on all matters relating to Public Health and Vaccination. He will be responsible to Government for the due performance of all duties laid down for the Executive and Subordinate Officers of the Public Health Department. His jurisdiction will extend over the whole Dominions of His Exalted Highness the Nizam including the Hyderabad City but excluding the British Administered areas and His Exalted Highness the Nizam's Cantonment or Military areas.

2. He will be in charge of all measures relating to vaccination, and the prevention of

فرائض و اختیارات و
ذمہ داریاں ناظم سررشتہ طبابت
وصحت عامہ ممالک محروسہ

سرکار عالی

ناظم طبابت سررشتہ طبابت
سرکار عالی سے عہدہ دار ناظمی ہیں
ورثت عامہ اور مملکت نزاری اور ماسی
نہیں سے متعلق جملہ امور میں
سرکار عالی ہونگے اور سرکار عالی کو اس امر کے
جو بندہ ہوں گے کہ جتنے فرائض انتظامی
مستحق عہدہ داران صحت عامہ سے مقرر
کئے لئے ہیں۔ ان کی کفایت بجا آوری
ہوتی ہے ان کے حدود اختیار میں کل
محکم محروسہ سرکار عالی اور بندہ حیدر آباد
بستون، علاقہ سرکار عظمت مدار اور علاقہ
کنٹونمنٹ باجھوانی افواج سرکار عالی
شامل ہوں گے۔

(۲) وہ جملہ امراض علی الخصوص
امراض وبائی مثلاً ڈیپک - طاعون -

6. He is an Inspecting Officer regarding urban and rural sanitation. He will be the expert adviser of local bodies and will suggest the course of action they should adopt in the sanitary branch of local administration. In cases of importance or wide application and in cases in which his recommendations receive not attention, he will address the Secretary in the Local Fund Department for the orders of Government.

7. He will inspect Municipal Towns, Town Committee areas, notified areas, rural tracts and give necessary advice.

8. Whenever he visits a Municipal Town or Town Committee areas or any notified area, the President, the Municipal Secretary, the Ward Member if any and the Health Officer should accompany him to discuss the position and requirement of the place from a

(۶) تہوں اور دیہاتوں کے انتظامات
حفظانِ صحت کے معانہ کنندہ افسر ہیں اور
اوکلفنڈ کمیٹیوں کے مسیر فنی ہوں گے اور
مقامی نظم و نسق میں سببہ حفظانِ صحت
کے لئے ضروری طریق عمل تجویز کریں گے۔
اہم یا وسیع پیمانہ پر قابلِ نفاذ معاملات میں
یا ان صورتوں میں جن میں ان کے سفارتات
پر کوئی توجہ نہ کی گئی ہو وہ بتوسہ معتمد
صاحب محکمہ اوکلفنڈ احکام سرکار حاصل
کریں گے۔

(۷) سررستہ صفائی سے متعلقہ
قصبہات - حدود ٹاؤن کمیٹی مستترہ رقبہات
(Notified Areas) اور دیہی مقامات
کا معانہ کر کے ضروری ہدایات دیں گے۔

(۸) جب کبھی وہ سررستہ صفائی
سے متعلقہ قصبہ یا حدود ٹاؤن کمیٹی یا مستترہ
رقبہ (Notified Area) کا معانہ
کریں تو میر مجلس صاحب اور معتمد صاحب
صفائی اور ممبر وارڈ - اگر کوئی ہو اور
ہلت افسر صاحب کو ان کے ہمراہ رہنا چاہیے

sanitary point of view. Any defects notified and improvements suggested in his inspection notes should receive the attention of Municipal authorities.

In District Headquarters, the First Taluqdar, the District Local Fund Engineer and the Divisional Local Fund Engineer, whenever present or called for and the District Health Officer will be invited to accompany him. In rural tracts the Second Taluqdar, if present, with the Tahsildar and Local Officers should accompany him. Any defects noticed and improvements suggested in his inspection should receive immediate attention of District Board, or Municipal Committee, or Town Committees.

تاکہ وہاں کے محسوس وقوع و رضہ و ریت کی نسبت حفظانِ صحت کے نقطہ نظر سے تبادلات کیا جاسکے وہ اپنے معائنہ رپورٹ (انسپیکشن نوٹ) میں جن جن نقائص کا اظہار اور جن اصلاحات کی سفارش کریں اُن پر ارباب سہ رستہ صفائی کو توجہ دینی چاہیے۔ مستقر ضلع میں اول تعقدار۔ اوکلفنڈ انجینئر ضلع۔ ڈویژنل انجینئر اوکلفنڈ جب وہ موجود ہوں یا طلب کئے گئے ہوں۔ اور ہلت انسر ضلع ناظم۔ و صوف کے ہمراہ دورہ کرنے کے لئے طلب کئے جائیں گے اور دیہی رقبہ جات میں دوم تعقدار (اگر وہاں موجود ہوں) تحصیلدار اور دیگر مقامی عمدہ داران ان کی معیت میں رہیں گے۔ میر مجلس ڈسٹرکٹ بورڈ یا مجلس صفائی یا ٹاون کمیٹی پر لازم ہے کہ جن نقائص کا اظہار اور جن اصلاحات کی سفارشات ناظم صاحب اپنے معائنہ رپورٹ میں کریں اُن پر توجہ کریں۔

9. He will send his inspection notes to the President of District Board or Municipal Committee or Town Committee and the District Health Officer. He may, however, send a copy of any of his inspection reports of tours to Government, if he considers that there is any reason for doing so.

10. He is the Plague Commissioner for the City of Hyderabad and Suburbs, and will be responsible to the Plague Committee for all anti-plague measures. He may appoint special staff needed during epidemics in anticipation of sanction.

He is authorized to detail any officer as a Special Executive Officer, in any infected area, but the responsibility and authority for administering the policy and measures will be vested in him, and he will control and direct the Special Plague Staff.

(۹) ناظم اپنی مدد سے رپورٹ (انسپیکشن نوٹ) ڈسٹرکٹ بورڈ یا مجلس صفائی یا ٹاؤن کمیٹی کے یہ مجلس اور ہلت انہ ضلع کے یاس روانہ کیا کرینگے اور اگر کسی وجہ سے مناسب سمجھیں تو اپنے کسی انسپکشن نوٹ کی نقل محکمہ سرکار میں بھی ارسال کر سکتے ہیں۔

(۱۰) میدر آباد اور اطراف بلدہ کے بلیگ کمشنر اور بلیگ کمیٹی کو جمد مانع طاعون انتظامات کے جوابدہ ہیں اور امراض وبائی کے زمانہ میں عند الضرورت خاص عملہ بامید منظور سی بلیگ کمیٹی متعین کر سکتے ہیں۔ وہ مجاز ہیں کہ کسی عمدہ دار کو اسپیشل اکرینیکیوٹیو افسر

(Special Executive Officer) کی حیثیت سے کسی متاثرہ رقبہ میں متعین کر دیں۔ لیکن مدبرانہ مصالح اور انتظامات کو رو بہ عمل لانیسی ذمہ داریاں اور اختیارات خود انہیں سے وابستہ رہیں گے۔ وہ طاعون کے اسپیشل عملہ کی نگرانی اور رہنمائی کرتے رہینگے۔

11. He will control the general policy of Vaccination throughout the State and will see that the work done in this direction by the Vaccination Staff is performed in an efficient manner.

12. He will submit the following administration reports to Government before the 15th Farwardi, every year:—

- i. Report on the Public Health in the Hyderabad State.
- ii. Report on vaccination in the Dominions including Vaccine Depot.
- iii. Report on the Special Plague Department and the Plague Commissioner's Department of the Hyderabad City.
- iv. Report on the Malaria Department in Hyderabad City.

(۱۱) وہ تمام ممالک محروسہ سرکار عالی میں جیک بر آری (ویاکسی نیشن) کی عام ماسی کے نگران و مختار ہوں گے۔ اور اس کا التزام رکھیں گے کہ عملہ جیک بر آری اپنے فرائض کی کما حقہ ادائی کر تار ہے۔

(۱۲) ہر سال ۱۵ فروردی سے قبل مندرجہ ذیل انتظامی رپورٹیں محکمہ سرکار کو ارسال کیا کریں گے:—

(۱) رپورٹ دربارہ صحت عامہ ممالک محروسہ سرکار عالی۔

(۲) رپورٹ دربارہ جیک بر آری ممالک محروسہ سرکار عالی۔ تسول ویاکسن ڈپو۔

(۳) رپورٹ بابتہ محکمہ اسپتال پبلک و پبلک کمشنری بلدہ حیدر آباد۔

(۴) رپورٹ متعلقہ محکمہ میریابلدہ حیدر آباد۔

- ii. Report on the administration of the Infant Welfare Centres in the State.
- i. Report of the Chemical and Bacteriological Laboratory.

13. He will keep a close watch on the general sanitary condition, and take action to ensure correct registration of Births and Deaths, and advise Government on all sanitary matters. He will keep Government informed regarding the prevalence of epidemic diseases, and take such action as may be necessary to prevent the occurrence, and spread of such diseases.

14. He will visit Government Schools and Colleges and record in the Visitors Book any remarks he has to make on Public Health matters, so that the attention of the educational

(۱۵) رورٹ شم، شق مرکز
بہودی امداد ملک محروسہ

(۱۶) رورٹ کیمیکل و بیکریو
ایڈوریٹری

(۱۳) عام حالات حفظان صحت ر
یوری و جہ رکھیں گے اور اعداد و
مات صحیح درج رجسٹر ہونے کیلئے
ضروری کارروائی عمل میں لائیں گے۔
محکمہ سرکار کو معاملات حفظان صحت میں
مسورہ دیتے رہیں گے۔ امراض و بانی کی
اشاعت سے محکمہ سرکار کو مطلع کرتے
رہیں گے۔ اور ایسی تدابیر عمل میں
لائیں گے جو ان امراض کے آغاز اور
اشاعت کو روکنے کے لئے ضروری ہوں۔

(۱۴) سرکاری مدارس اور کالجوں
(Colleges) کا معائنہ کریں گے اور
صحت عامہ سے متعلقہ امور کی نسبت جو
رائے ظاہر کرنا چاہیں گے کتابچہ معائنہ
کنندگان (وزیٹرس بک) میں درج
کر دیں گے تاکہ ارباب سرشتہ تعلیمات

authorities be drawn to the defects.

15. He will see that necessary lectures are delivered on Health subjects, and impress on the local bodies the need for Health propaganda work. He is authorized to contribute articles in local and official papers on all health matters.

He will direct his staff and supply necessary propaganda leaflets, magic lanterns, etc., and see that the Health propaganda is being systematically and efficiently carried on.

16. He will from time to time suggest necessary measures for child welfare and prevention of infantile and maternal mortality.

کی توجہ مظہرہ نقائص کی طرف معصوف ہو سکے۔

(۱۵) اس کا انتظام کرے کہ صحت عامہ کے موضوع پر بالالتزام لکچر ہوا کریں اور صحت عامہ کے متعلق کار تبلیغ (پروپگنڈا) کی ضرورت مجالس نوکلنڈ کے ذہن نشین کراتے رہیں گے۔ یہ مجاز ہیں کہ مقامی اور سرکاری اخبارات میں صحت عامہ کے موضوعات پر مضامین شائع کراتے رہیں۔

وہ اپنے عملہ کی رہنمائی کرتے رہیں گے اور ان کو چھوٹے چھوٹے ایک ورتی تبلیغی استمارات اور طلسمی فاؤس (سجک لینٹرن) وغیرہ سربراہ کریں گے اور اس کا التزام رکھیں گے کہ اصول حفظان صحت کی تبلیغ باقاعدگی اور قابلیت کے ساتھ کیجاتی ہے۔

(۱۶) بیہودی اطفال کے لئے اور بچوں کی اموات کا سدباب کرنے کیلئے وقتاً فوقتاً تھاپریشن کرتے رہیں گے۔

17. During famine he will be responsible for the general health in the declared area, and will depute a reliable doctor to carry out his suggestions. The Famine Commissioner will see that suggestions made by the Director are undertaken. He will visit the stricken area at least once a month and submit his report to the Government.

18. He will send weekly reports of outbreaks of Plague, Cholera, Small-pox, etc., to the Directors of Public Health, Madras, Nagpur and Poona. He will similarly notify cases of epidemic diseases occurring in any of the Uruses and Jatras that are held in the Dominions.

19. He is authorized to accord sanction to the expenditure of Rs. 3,000 yearly allotted to each district in connection with the prevention and prevalence of epidemic diseases.

(۱۷) قحط کے زمانہ میں جو رقبہ متاثر قرار دیا جائیگا اُس کی عام صحت کے ذمہ دار ہوں گے اور وہاں ایک معتبر ~~مسندہ~~ دار کو اپنے تجاویز و بہ عمل لانے کے لئے متعین کریں گے۔ کمشنر قحط ملحوظ رکھیں گے کہ ناظم صحت عامہ کی تجاویز عمل کیا جاتا ہے ناظم قحط زدہ رقبہ کا معائنہ کم از کم مہینہ میں ایک بار کریں گے اور محکمہ سرکاریں اپنی رپورٹ پیش کریں گے۔

(۱۸) طاعون - ہیضہ - چیچک وغیرہ کے آغاز کی ہفتہ واری رپورٹیں مدارس ناگپور - اور پونہ کے نظامیہ بینک ہلت کو بھیجا کریں گے۔ اسی طرح اُن امراض وبائی کی وارداتوں کی اطلاعات شائع کرائیں گے جو ممالک محروسہ سرکار عالی میں کسی عرس یا جاتر میں واقع ہوں گی۔

(۱۹) وہ مقتدر ہیں کہ انسداد و اشاعت امراض و مائی سے متعلق جو رقم تین ہزار روپے سالانہ فی ضلع منظور ہے اس کے صریحہ کو منظور کریں۔

20. He is also authorized to sanction up to Rs. 5,000 in addition to the above for any district or districts for the above purpose. Thus the total amount of expenditure on epidemic diseases for Districts will not exceed Rs. 50,000 a year.

21. Out of the amount reserved for Hyderabad, he is authorized to spend up to Rs. 5,000 a year for meeting expenses on epidemic diseases, other than Plague.

22. He is also empowered to spend Rs. 5,000 imprest under his custody to meet emergent anti-plague expenditure in the City of Hyderabad in anticipation of sanction by the Plague Committee.

23. He is authorized to allow Uruses and Jattras to be held for any number of people

(۲۰) وہ مقتدر ہیں کہ مقصد محو نہ
صدر کے لئے علاوہ رقم بالا کے مزید پانچ
ہزار کسی ایک ضلع یا جمہد اضلاع کے لئے
منظور کریں اسی طرح تمام اضلاع میں
وبائی امراض کے انسداد پر مجموعی مصارف
کی مقدار پچاس ہزار سالانہ سے متجاوز
نہوگی۔

(۲۱) بلکہ کے لئے جو رقم محفوظ ہے
اس کے منجملہ طاعون کے علاوہ دیگر امراض
وبائی کے اخراجات کی یا بجائی کے لئے سالانہ
پانچ ہزار کی حد تک صرف کرنے کے وہ
مقتدر ہیں۔

(۲۲) وہ مقتدر ہیں کہ طاعون سے
متعلق ضروری انسدادی انتظامات بلکہ
حیدرآباد میں عمل میں لانے کے لئے پانچ ہزار
پیشگی مدامی جو ان کے تحویل میں رہتی
ہے بامید منظوری پیگ کمیٹی صرف
کریں۔

(۲۳) وہ مقتدر ہوں گے کہ اعراس
اور جاتر بلا لحاظ تعداد اشخاص ایسے

where there is no epidemic disease. In times of epidemics, Uruses, Jatras, Melas, etc., which ordinarily collect less than 5,000 people, may under the orders of the Director, Public Health Department be made "local" and general congregation discouraged.

24. He may at his discretion call for the plans and estimates for any sanitary work although it may not be of a category requiring his final sanction. In proposals concerning works costing more than Rs. 500, if within 20 days of acknowledgment of receipt of the resolution, the Director, Medical and Public Health Department, has not called for plans and estimates the District Board or Municipal Committee is free to proceed with the execution of the work. If, however, the Director communicates his objections on sanitary grounds, to any proposed work, the District Board or Municipal Committee shall desist from executing the work

مقامات پر عام طور پر منع کی اجازت دیں۔ جہاں وبائی امراض شایع ہوں اور اشاعت امراض وبائی کے زیادہ۔ یہیں اس بات پر استدراجت نیمہ جس میں عموماً ناختمہ از سے کم کا جمع ہوتا ہو ناختمہ صحت عامہ کے حکم کے تحت مقامی قرار دے جائیں گے اور عام اجتماع ہونے دیا جائیگا۔

(۲۴) وہ اپنی صوابدید پر جملہ عمارات حفظان صحت کے نقشہ جات اور برآوردات طلب کر سکیں گے اگر جب کہ وہ کام ان ابواب میں داخل ہوں جن کے لئے ان کی منظوری بالآخر ضروری ہے اگر بایں سو روپے سے زائد لاگت کی تعمیر کے رزولیوشن کی تاریخ و صوابدہی سے (۲۰) یوم کے اندر انہوں نے نقشہ اور برآورد طلب نہیں کئے ہیں تو ڈسٹرکٹ بورڈ یا مجلس صفائی کو اختیار ہے کہ تعمیر آغاز کر دے۔ لیکن اگر ناظم موصوف نے اصول حفظان صحت کی بناء پر کسی مجوزہ کام کی نسبت

until the Board has considered the objections. If the Board is of opinion that the objections should be overruled, the matter will be forwarded to Government for decision through the Subedar and the Director, Medical and Public Health Department.

25. All proposals regarding major works, involving an expenditure of Rs. 5,000 or more, accepted by the District Board or Municipal Committee or Town Committee will be forwarded by the Subedar to Government through the Director, Medical and Public Health Department.

26. Regarding transfer of funds, administrative and other powers, he will have the powers granted to him as Director, Medical Department, by Government (Finance Letter No. 414/415, dated

اعراضات پیچیدہ ہیں تو ڈسٹرکٹ بورڈ اور مجلس صفائی کا رٹمیہ سے اس وقت تک احتراز کرتے رہیں گے جب تک بورڈ، کور اعراضات رکامل غور نہ کرے۔ رٹ بورڈ کی رائے یہ ہو کہ اعراضات قابل منسوخی ہیں تو کارروائی بغرض تصفیہ سرکاریں صوبہ دار اور ناظم سررشتہ طبابت و صحت عامہ کے توسط ارسال کی جائیگی۔

(۲۵) وسیع عمارات (ہیجر ورکس) سے متعلقہ ہر اس تحریک کو جس پر یا پھر ار روپے یا اس سے زائد کا خر فائدہ ہو سوا لا ہے اور جو ڈسٹرکٹ بورڈ یا مجلس صفائی ٹاؤن کمیٹی سے منظور کی جا چکی ہے صوبہ دار توسط ناظم سررشتہ طبابت و صحت عامہ محکمہ سرکاریں پیش کریں گے۔

(۲۶) منتقلی فنڈ - انتظامی و دیگر اقتدار کی معاملات کے متعلق اُن کو وہی اختیارات حاصل ہونگے جو اُن کو بحیثیت ناظم سررشتہ طبابت سرکار عالی کی جانب سے ذریعہ مراسلات فینانس نشان (۱۵-۴۱۴)

14-3-1342 F., and letter
No. 446 /447, dated 15-3-1342
F.).

اوشان
۱۳۳۱
سہ ف

27. He will make arrange-
ments for the training examin-
ation and certificate of the
Vaccination Staff and Health
Sub-Inspectors in the Domin-
ions.

ورہات
ت اور
ندرون
ہیں گے۔

**Duties, Powers and Responsibilities of Assistant Directors of Public Health,
H.E.H. the Nizam's
Government.**

فرائض ذمہ داریاں اور
اقتدارات مددگار نظمہ
صحت عامہ سرکار عالی

1. They will work under the general direction of the Director of Medical and Public Health Department.

(۱) مددگار نضر، صحت عامہ ناظم طبابت و صحت عامہ کے عام ہدایات کے تحت کام کریں گے۔

2. They are debarred from private practice.

(۲) وہ خانگی طور پر علاج (پرائیوٹ پرائکٹس) نہ کر سکیں گے۔

3. They will under orders of the Director of Medical and Public Health Department visit all towns in their circle whether managed by District Boards or Municipalities, inspect the work of the Health Staff in the different branches of Sanitation and officially report their recommendation through the Director of Public Health. Apart from District Headquarter towns they will supervise and direct the work of the District Health Officer particularly in the control of infectious diseases, manage-

(۳) وہ حسب احکام ناظم طبابت و صحت عامہ اپنے اپنے حلقہ کے جمہد قصابات میں دورہ کرینگے خواہ وہاں ڈسٹرکٹ بورڈ کی جانب سے انتظامات عمل میں آتے ہوں یا محکمہ صفائی سے اور حفظان صحت کے مختلف شعبوں میں ہیلت اسٹاف کے کام کا معائنہ کریں گے اور سرکاری طور پر اپنے سفارشات بذریعہ ناظم صحت عامہ ارسال کریں گے۔
(ماسوائے قصابات کے جو ضلع کے مستقر ہیں)
مستقر ہائے اضلاع کے علاوہ وہ ہیلت انسپران اضلاع کے کام خصوصاً کارہائے انسداد امراض متعدی انتظامات اعراض و جاترا

ment of Uruses and Jatras, investigation of vital statistics, propaganda work and vaccination.

4. They have the right to attend ordinary meetings of the District Board or Municipal Committee or Town Committee and to address the meeting on any health matters that are under discussion, but will have no vote.

5. They will keep in close touch with the Subedars and District Taluqdars with the object of promoting measures touching public health. They will encourage mutual co-operation between local executive authorities and the Public Health Department.

6. They will advise and assist in all necessary actions taken in sanctioned and routine matters concerning Public Health.

حیات و ممات تحقیقات اعداد کار ہائے تبلیغ اور طریق ٹیکہ انہ ایزی کی نگرانی کریں گے اور انکے متعلق ہدایات دیں گے۔

(۴) اُن کو اس امر کا استحقاق ہے کہ ڈسٹرکٹ بورڈ اور مجلس صفائی (میسونسل کمیٹی) یا ٹاؤن کمیٹی کے معمولی جلسوں میں شریک ہوں اور صحت عامہ کے متعلق جو مضمون زیر بحث ہو اُس پر حاضرین جلسہ کو مخاطب کریں لیکن اُن کو رائے دہی (ووٹ) کا حق حاصل نہ ہوگا۔

(۵) تعلقداران ضلع اور صوبہ داران سے باتقاعدہ روا با اس غرض سے رکھیں گے کہ کارہائے صحت عامہ کو فروغ حاصل ہو سکے اور اس امر کی کوشش کریں گے کہ مقامی حکام انتظامی اور محکمہ صحت عامہ کے مابین اتحاد و عمل قائم رہے۔

(۶) صحت عامہ کے منظورہ اور روزمرہ کے دستوری معاملات میں جو ضروری کارروائیاں ہوتی ہیں اپنا مشورہ اور امداد دیں گے۔

7. They will inspect the work of all Public Health employees of the Department as far as possible.

8. They are authorized to suspend Health Inspectors, Health Sub-Inspectors, Deputy Inspectors of Vaccination and Vaccinators employed by the Public Health Department for any serious offence or misdemeanour. A report of the case will be submitted to the Director of Medical and Public Health Department for his final decision.

9. They are authorized to punish by warning or fine, Health Inspectors, Health Sub-Inspectors, Deputy Inspectors of Vaccination and Vaccinators employed by the Public Health Department for default in work or misconduct. The fine inflicted on the subordinates will not be more than one quarter of a month's pay.

10. They will inspect the work of the safai staff employed by the District Boards, Municipal or Town Committee as often as may be practicable, and report defects noticed to First Taluqdars.

(۷) اجناس تک امکان ہوگا جسے لازماً
محکمہ صحت عامہ کے کام کا معاونہ کریں گے۔

(۸) وہ مجاز ہیں کہ محکمہ صحت عامہ کے
مقرر کردہ ہلت انسپکٹر ان و ہلت سب
انسپکٹر ان ناظر چیچکبراران اور چیچکبراران
کو سخت جرم یا بد اطواری کی علت میں معطل
کریں ایسے معاملات کی رپورٹ ناظم صاحب
طبابت و صحت عامہ کے پاس قطعی فیصلہ
کے لئے پیش کرنی ہوگی۔

(۹) وہ مجاز ہیں کہ محکمہ صحت عامہ کے
مقرر کردہ ہلت انسپکٹر ان و ہلت سب
انسپکٹر ان ناظر چیچکبراران اور چیچکبراران
کو خطا کاری یا بد رویگی کی علت میں سزائے
جرمانہ دیں یا تنبیہ کریں۔ عملہ جرمانہ ایک ماہ
کی تنخواہ کے ربع حصہ سے زیادہ نہ ہوگا۔

(۱۰) عملہ صفائی مقرر کردہ مجاس
اصلاح - صفائی یا ناؤن کمیٹی کے کام کا
معاونہ حتی الامکان جتنے بار ہو سکے گا کیا
کریں گے اور جو نقائص نظر آئیں گے ان کی
رپورٹ اول تعلقہ داران کو ارسال کریں گے۔

11. They will submit to the Director of Medical and Public Health Department every month their provisional tour programme. Their tour will as a rule be by motor as they have to check vaccination in villages, check vital statistics and attend to epidemics. They will as far as possible inspect villages on their route. Tour programmes will be made in consultation with the Director of Medical and Public Health Department and a copy will be sent to the First Taluqdars, Second Taluqdars, the Tahsildars, and the District Health Officers.

12. They will direct and inspect the work of District Health Officers, Assistant Health Officers, Health Inspectors, Health Sub-Inspectors, Deputy Inspectors of Vaccination and Vaccinators of the District during their tours, and will remain with each individual long enough to see that every part of his work is attended to with the requisite care and diligence, and also

(۱۱) اپنے دورہ کا عارضی پروگرام ہر ماہ ناظم طبابت و صحت عامہ کے ہاتھ میں پیش کریں گے۔ عام طور پر ان کے دورہ موٹر میں ہوا کریں گے کیونکہ دیہاتوں میں جاکر ٹیکہ اندازی اور حیات و ممات کے اعداد کی تنقیح اور امراض وبائی کی جانب توجہ کرنا ان پر لازم ہے۔ بحین دورہ راستہ میں موقوفہ مواضع کا حتی الامکان معائنہ کریں گے۔ دورہ کا پروگرام ناظم طبابت و صحت عامہ کے مشورہ سے تیار کیا جائیگا جس کے بقول اول تقلداران دوم تقلداران تحصیلداران ہلت افسران ضلع کو ارسال کئے جائیں گے۔

(۱۲) بحین دورہ ہلت افسران ضلع و مددگار ہلت افسران - ہلت انسپکٹران و ہلت سب انسپکٹران - ناظر چیف کبراران اور چیف کبراران ضلع کے کام کی تنقیح اور ان کی رہنمائی کریں گے اور ہر افسر کے ساتھ کافی وقت تک رہ کر اس بات کی تحقیق کریں گے کہ آیا وہ اپنے کام کے ہر جز کو

long enough to give encouragement and create confidence and good-will among the people.

13. Routine check of Vaccination and Sanitary Inspection must be done by Assistant Directors of Public Health in and around encampments and on the line of march.

14. They will visit all districts and taluqs each year. They will also visit as many villages as possible paying particular attention to villages infected with epidemics.

15. They may detail any sanitary subordinate for special duty, in connection with epidemics or where special concentration is necessary, from one district to another in anticipation of sanction of the Director of Medical and Public Health Department.

ضروری احتیاط اور مستعدی سے انجام دیتے ہیں۔ علاوہ ان میں مقدمی ہسپتالوں کی منت افزائی اور ان میں اعتماد اور حسن ظن پیدا کرنے کی غرض سے بھی کافی مصروفیت قائم کریں گے۔

(۱۳) ٹیکہ اندازی کی دستوری جانچ اور معائنہ حفظان صحت مقامات دورہ اور اس کے ارد گرد نواح اور اثناء راہ میں لازماً کریں گے۔

(۱۴) ہر سال جمہد اضلاع اور تعلقوں کا دورہ کریں گے نیز جتنے دیہاتوں کا ممکن ہو سکیگا معائنہ کریں گے۔ اور ان مواضع پر خاص طور سے توجہ کریں گے جو امراض وبائی سے متاثر ہوں۔

(۱۵) امراض وبائی کے سلسلہ میں یا۔ اُس صورت میں کہ کہیں خاص حالات کی وجہ سے از دیاد عمدہ ضروری ہے حفظان صحت کے عمدہ سے کسی شخص کو ایک ضلع سے دوسرے ضلع میں یا مہد منظوری ناظم سررشتہ طبابت و صحت عامہ خاص ڈیوٹی پر متعین کر سکیں گے۔

16. They will visit Medical Officers of hospitals and dispensaries when on tour, and direct what course should be taken to remedy the sanitary defects in the villages or towns in which the dispensaries are situated. They will see the attendance registered for mortality statistics and incidence of various diseases. They will inspect the office of the District Health Officer and ensure correct and standard records and returns.

17. They will inspect the management and equipment of the travelling dispensaries in charge of Assistant Health Officers, and will see that the travelling dispensaries are utilized to their fullest extent for the public benefit.

(۱۶) شفا خانہ جات اور دوا خانہ جات کے طبی عہدہ داران (مڈیکل افسر) سے بحین دورہ مل کر اُن کو ہدایت کریں گے کہ جس موضع یا قصبہ میں اُن کا دوا خانہ قائم ہے وہاں کے حالات حفظانِ صحت کے نقائص دور کرنے کے لئے کیا کیا طریقے اختیار کئے جائیں۔ رجسٹرات مرجعہ کا معائنہ اعداد و اسباب - نوعیت امراض کے علم کی غرض سے کریں گے ہلت افسر صاحب ضلع کے دفتر کا معائنہ کر کے اس امر کا پورا اطمینان کر لیں گے کہ اندراجات اور تختہ جات اعداد و شمار حسب معیار اور صحیح ہیں۔

(۱۷) مددگار ہلت افسران کے زیر نگرانی دوا خانہ جات دورہ کے نظم و نسق اور ساز و سامان کا معائنہ کریں گے اور اس کا اطمینان کریں گے کہ دوا خانہ جات مذکور اطلاع عام کیلئے ممکنہ طور پر کام میں لائے جاتے ہیں۔

18. They may recommend the District Health Officer to order the movement of a travelling dispensary according to local requirements.

19. They will visit the centres of great and unusual epidemics and report to the Director of Medical and Public Health Department, outbreaks of such epidemics and the remedial measures undertaken or proposed. They will also advise District and Taluq Boards, Municipalities and Town Committees to employ extra Health Staff during severe epidemics.

20. They will deliver lectures on health, prevention of epidemics and other diseases. They will impress on the District Boards, Municipal and Town Committees the need for Health Propaganda work. They will discuss sanitary matters with the people during their inspection in a friendly manner and impress on them the benefits derived from such directions.

(۱۸) ہلت افسر ضلع کو ذبح خانے کے مقامی ضروریات کے اعتبار سے کسی دواخانہ دورہ کی منتقلی عمل میں لانی ہائے۔

(۱۹) شدید اور غیر معمولی امراض وبائی کے مراکز اشاعت کا معائنہ کریں گے۔ اور اس قسم کی وبا کے شیوع کی کیفیت اور مجوزہ یا اختیار کردہ انسدادی تدابیر کی رپورٹ ناظم طبابت و صحت عامہ کے پاس پیش کریں گے۔ ضلع اور تعلقہ کے بورڈ صفائی اور ٹاؤن کمیٹیوں کو شدید امراض وبائی کے زمانہ میں از دیاد عمدہ صفائی کے متعلق مشورہ دیں گے۔

(۲۰) اصول صحت اور امراض وبائی اور دیگر امراض کے اندفاع پر لکھ دیں گے۔ عمل تبلیغ (پروپگنڈا) کی ضرورت ڈسٹرکٹ بورڈ صفائی اور ٹاؤن کمیٹیوں کے اراکین کے دل نشین کرائیں گے اور بحین دورہ معائنہ صحت کے موضوع پر لوگوں سے دوستانہ گفتگو کر کے ان ہدایات کے فوائد اُن کے ذہن نشین کرائیں گے۔

21. They will train the Assistant Health Officer in propaganda work, and give expert advice to them on matters of public health within their jurisdiction.

22. They will suggest necessary measures for child welfare and the prevention of infantile and maternal mortality.

23. They will check village vital statistics by examining registers and reports of patels, and will give advice as to the proper classification of the cause of death, and generally ensure correct and prompt registration of births and deaths. They will bring to the notice of the Local Officers immediately any delay in reporting the outbreak of epidemic disease.

24. They will note important sanitary defects in the village inspected and make necessary recommendations for remedying them.

(۲۱) مددگار ان ہلت آفس ان کو تبلیغی کاموں کی (مرو مٹندہ) کی تعلیم دینگے اور اپنے زیر اختیار حدود میں معاملات صحت عامہ کے متعلق ماہرانہ مشورہ دینگے۔

(۲۲) بھودی اطفال کی نسبت نیز زچاؤں اور بچوں کی اموات کے انسداد کے متعلق ضروری تدابیر تجویز کریں گے۔

(۲۳) دیہی اعداد و حیات و ممات کی جانچ ٹیلوں کے رجسٹرات اور اُن کی رپورٹوں کا معائنہ کر کے کریں گے اور اسباب موت کے صحیح قسم واری اندراج کی فہمائش کریں گے اور اس امر کا انتظام کریں گے کہ حیات و ممات کی اطلاع فوراً صحیح صحیح درج رجسٹر ہوا کرے اور اگر تسبوع امراض وبائی کی اطلاع دینے میں (ریورٹس) تاخیر کی گئی ہو تو مقامی عہدہ داران کو فوراً اس امر سے مطلع کریں گے۔

(۲۴) جس قصبہ میں دورہ کریں گے وہاں کے انتظامات مقفان صحت کے خاص نقائص نوٹ کر کے اُن کے اصلاح کی ضروری تجاویز پیش کریں گے۔

25. They will submit proposals for improving the supply of drinking-water, disposal of refuse, conservancy, drainage systems, slaughter-houses, markets, town-planning, etc.

26. They will attend personally all important Uruses and Jatras where over 20,000 persons are expected and make arrangements for their assistants to attend those Uruses and Jatras where the congregation is likely to be under 20,000.

27. They will make recommendations to the Presidents of District and Taluq Boards or Municipal Committee regarding the provision of disinfection and sanitary equipment in any special locality. They will satisfy themselves as to the conditions of such equipment, during their inspections.

28. They will inspect all factories and advise the District Health Officer.

(۲۵) آب و تہذیب کی رسد - انتظام
قصد - صفائی بد رو (ڈرنج) مسلح -
مارٹ اور نقشہ بندی قبضہ وغیرہ (ٹاؤن
پلاننگ) کی حالت میں اصلاح کرنے کے
لئے تجاویز پیش کریں گے۔

(۲۶) ایسے کل اہم اعراس و جاتر میں
جہاں بیس ہزار سے زائد انتخاب کے
اجتماع کی امید ہو تو وہ خود جایا کریں گے اور
جہاں بیس ہزار سے کم کا اجتماع ہوتا ہو
وہاں اپنے مددگار ان کے موجود رہنے کا
انتظام کریں گے۔

(۲۷) کسی خاص مقام کے لئے سامان
ڈس انفیکشن اور حفظان صحت متعلقہ
چیزوں کی سہراہی کے انتظام کے لئے اصلاح
اور تعلقہ کی مجالس (بورڈ) مجلس صفائی
کے ممبر مجلس صابان سے سفارش کریں گے
اور اپنے معائنہ میں مذکورہ ساز و سامان
کی حالت کی طرف سے اطمینان کر لیں گے۔

(۲۸) جملہ کارخانہ جات (Factories)
کا معائنہ کریں گے اور ان کے متعلق ہٹ
انسٹر صاحب ضلع کو ہدایات دیں گے۔

29. They will inspect all cinemas, public parks, music-halls, theatres, hotels, tea-shops, restaurants, boarding or sleeping houses and make necessary suggestions.

30. They may when deputed by the Director of Medical and Public Health Department, inspect any Municipal town and will be accompanied by the Ward Officer, if any, and the District Health Officer, Second Taluqdar, if President of Local Fund Committee. The Tahsildar and Health Inspector should be invited to accompany them during inspections.

(۲۹) سینماؤں - یارکوں - موسیقی گاہوں (میوزک ہال) ٹھیٹر - ہوٹل - حائے خانہ - رستورانٹ اور مکانات طعام و قیام کا معائنہ کر کے ضروری تجاویز پیش کریں گے۔

(۳۰) جب کبھی ناظم طبابت و صحت عامہ انہیں حکم دیں تو وہ سررشتہ صفائی کے زیر نگرانی ہر قصبہ (میونسپل ٹاؤن) کا معائنہ کر سکتے ہیں۔ ایسے موقع پر انسر حلقہ (وارڈ انسر) اگر کوئی ہو اُن کے ساتھ رہیگا اور ہلت انسر ضلع دوم تعلقہ دار اگر وہ میر مجلس لوکل فنڈ کمیٹی ہوں - تحصیلدار - اور ہلت انسپکٹر کو دوران معائنہ اُن کی معیت میں رہنے کیلئے بلا لیا جائیگا۔

Duties, Powers and Responsibilities of District Health Officers (Civil Surgeons)

**فرائض ذمہ داریان و
اقدار اہلقت آفسران صلیع
(سیول سرجنسان)**

1. He will be the executive head of the Health Staff employed in his district.

(۱) ہلت آفسر صلیع اپنے صلیع کے عملدہتہ کے اعلی انتظامی آفسر ہوں گے۔

2. He will exercise full administrative control, and will be responsible for the carrying out the policy and the orders of the Director of Medical and Public Health Department.

(۲) وہ کامل انتظامی اعتبارات کام میں نہینگیے اور ناظم طبابت و صحت عامہ کے احکام کی تعمیل اور انتظامی مصلح (پالیسی) کو روبہ عمل لانے کے ذمہ دار ہوں گے۔

3. He will correspond in all matters concerned with his Department with the Director of Medical and Public Health Department.

(۳) اپنے محکمہ کے جملہ معاملات میں ناظم طبابت و صحت عامہ سے مراسلت کریں گے۔

4. He will be responsible for sanitation, vaccination and all public health activities in his district. He will be responsible for discipline and control of the staff paid by the Public Health Department. He is authorized to fine subordinates whose maximum pay does not exceed Rs. 50 a month.

(۴) اپنے صلیع کے حفظان صحت ٹیکہ اندازی اور دیگر انتظامات صحت عامہ کے ذمہ دار اور اُس عملہ کی نگرانی اور تادیب کے جوابدہ ہوں گے جس کی ٹخواہ محکمہ صحت عامہ سے ادا کیجاتی ہے اور وہ مقتدر ہوں گے کہ اپنے ماتحتین کو جن کی اتہنائی ٹخواہ (۵۰) روپے ماہانہ سے زیادہ نہو جرمانہ کریں۔

5. He will note important sanitary defects in the towns and villages inspected and make recommendations for remedying them.

6. He will submit proposals for improving the supply of drinking-water and the improvement of drainage systems.

7. He is authorized to appoint menial servants. He may suspend, fine or dismiss a menial servant. The offence and the punishment must be fully recorded in each case.

8. He is authorized to sanction leave to all his subordinates whose maximum pay does not exceed Rs. 50 a month and to make officiating arrangements.

(۵) قصبہات اور دیہات کا معائنہ کرتے وقت انتظامات حفظن صحت میں جو اہم نقائص نظر آئیں گے اُن کو درج یادداشت کر لیں گے۔ اور ان کی اصلاح کیلئے تدابیر تجویز کریں گے۔

(۶) آب نوشیدنی کی رسد کو بہتر بنانے اور ڈرنیج کے نظام میں اصلاح کرنے کے لئے تجاویز پیش کریں گے۔

(۷) وہ عہدہ ادنیٰ کو لازم رکھنے اُن پر جرمانہ کرنے یا اُن کو معطل یا برطرف کرنے کے مجاز ہیں لیکن ہر صورت میں جرم اور سزا کو واضح طور پر ضبط تحریر میں لانا ضروری ہوگا۔

(۸) وہ مقتدر ہوں گے کہ اپنے تمام ماتحتین کی جن کی انتہائی تنخواہ (۵۰) روپیہ ماہانہ سے زائد نورخصت منظور اور انتظامات منصرمانہ کر سکیں۔ ان کو اندرون ضلع ہلت سب انسکڑان و چیکبراران کے تبادلہ کرنے کا اقتدار حاصل ہوگا۔

9. He will be empowered to transfer Health Sub-Inspectors and Vaccinators within his own district. Health Sub-Inspectors and Vaccinators will only be transferred from one district to another on the orders of the Director of Medical and Public Health Department.

10. He is authorized to suspend any of his subordinates below the rank of Assistant Health Officer for any misconduct; the matter must be reported to the Director of Medical and Public Health Department if the appointment does not rest with himself. Sufficient precaution must be taken that this power is not abused. Definite charges will be framed and sufficient opportunities given to the accused to make his defence.

11. He will check village vital statistics by examining registers and reports, and give instructions as to the proper classification of the cause of death and generally ensure the correct maintenance of birth and death registers. He should

(۹) ہلت سب انسپکٹران اور- چیچکبران ان کے تبادلے یک ضلع سے دوسرے ضلع میں ناظم طبابت و صحت عامہ کے حکم سے عمل میں آئیں گے۔

(۱۰) وہ مقتدر ہوں گے کہ اپنے کسی ماتحت کو جس کا درجہ مددگار ہلت آفیسر سے کم ہو کسی بد چلتی کی یاد اس میں معطل کریں اور اگر تقرر ان کا اختیاری ہو تو اسکی اطلاع ناظم طبابت و صحت عامہ سرکار عالی کو کریں۔ کافی احتیاط کیجائے کہ یہ اقدار بیجا طور پر استعمال نہ ہونے پائے۔ الزامات منسوب بہ مرتب کئے جائیں۔ اور غلطی کو عذرات پیش کرنے کا کافی موقع دیا جائے۔

(۱۱) مواضعات کے اعداد و حیات و ممات کی جانچ رجسٹرات اور رپورٹ کے لحاظ سے کریں گے۔ اور اسباب اموات کے صحیح قسم و ادوی اندراجات کرنیکی ہدایت کریں گے۔ اور اس کا عام

ask the Taluqdar in towns where Sanitary Inspectors have been appointed to make them responsible for the correct returns of births and deaths.

12. He will receive a monthly return of births and deaths in his district from the Superintendent of Police and after checking them, will forward the same with his remarks to the Director of Public Health not later than the 20th of the succeeding month.

13. He will submit a quarterly report on sanitation of Headquarters of the district to the President of the Local Fund Committee and will forward a copy of this report to the Director of Public Health.

طور پر انتظام کریں گے کہ حیثیت و موت کے رجسٹر صحیح طور پر رکھے جاتے ہیں ان کو ان قصہ بات میں جہاں سینٹری انسکٹر مامور کئے گئے ہیں تعلقہ ارضیہ سے مطابہ کرنا چاہیے۔ کہ وہ ان کو تختہ جات حیات و ممات کی صحت کا جو ابدہ گردانیں۔

(۱۲) مہتمم کو تواری کے دفتر سے ان کے ضلع کا ایک ماہواری تختہ جس میں پیدائش و اموات کے اعداد درج ہوں گے ان کے پاس آیا کریگا۔ جس کو وہ بعد تنقیح اپنی رائے کے ساتھ ناظم طبابت و صحت عامہ کے دفتر پر آئندہ ماہ کی ۲۰ تاریخ تک روانہ کر دیا کریں گے۔

(۱۳) مستقر ضلع کے انتظامات حفظان صحت کی نسبت سے ماہ ہی رپورٹ میز مجلس لوکل فنڈ کمیٹی کو ارسال کیا کریں گے اور اُس کی ایک نقل ناظم سررشتہ صحت عامہ کے پاس روانہ کریں گے۔

14. (a) He will send in a weekly consolidated Plague, Cholera and Small-pox return to the Director of Medical and Public Health Department every Monday. He will also send a weekly District Epidemic Mortality return to the neighbouring Civil Surgeons and to the Public Health Authorities of British India bordering his district, and Railway authorities. Taluq Medical Officers will not be expected to submit to District Health Officer any weekly return of epidemic disease but will demi-officially inform the District Health Officer of any fresh outbreak that comes to their notice.

(b) He will send a monthly consolidated vaccination statement of work done, and vaccination inspections made in his district not later than

(۱۴) (الف) مرد و تنبہ کو معاون ہفتہ اور چیچک کے اعداد کا ہفتہ واری صدر تختہ ناظم سررشتہ طبابت و صحت عامہ کے دفتر ہر سال کریں گے۔ اسی طرح اپنے ضلع میں امراض و مائی سے واقع ہونے والی اموات کا ایک ہفتہ واری تختہ (ایڈمیک مارٹالینٹی ریٹرن) اطراف و اکناف کے اضلاع کے سیول سرجن اور اپنے ضلع سے ملحقہ علاقہ برطانوی ہند کے عہدہ داران صحت عامہ اور آفیسران ریلوے کو ارسال کریں گے۔ امراض و بائی کا ہفتہ واری تختہ ہلت آفیسر ضلع کو ارسال کرنے کی توقع میڈیکل آفیسران تعلقہ سے نہ کی جائیگی۔ البتہ وہ امراض و بائی کی ہر جدید اشاعت کی اطلاع جس کا انہیں علم ہو نیم سرکاری طور پر ہلت آفیسر ضلع کو کر دیں گے۔

(ب) ان کے ضلع میں جس قدر مانع
چھپک ٹیکہ اندازی عمل میں لائی گئی
ہوگی یا کاربائے چھپک براری کی تنقیح

the 15th of every month in the form prescribed, the return to include vaccinations done by Medical Officers and other agencies.

(c) He will send a consolidated monthly Plague and Cholera inoculation return to the Director of Medical and Public Health Department by the 15th of every month.

(d) He will also send any other returns as may be ordered by the Director from time to time.

15. He will submit to the Director of Medical and Public Health Department before 1st Dai of each year an interesting and complete report on the Public Health and Vaccination administration of his district during the preceding official year, together with the prescribed annual statistics.

کی گئی ہوگی ان کا ایک صد تختہ ہر ماہ
۱۵ - تاریخ تک - مقررہ فارم ہر سال
کریں گے۔ اس تختہ میں میڈیکل آفیسر
اور دیگر اسخاص کی انجم دادہ ٹیکہ
اندازی بھی درج کیجائیں گی۔

(ج) مانع حاحون و ہیضہ ٹیکہ
اندازی کا ماہواری صد تختہ ہر ماہ کی
۱۵ - تاریخ تک ناظم طبابت و صحت
عامہ کو ارسال کریں گے۔

(د) دیگر تختہ جات جو ناظم صحت عامہ
وقتاً فوقتاً طلب کریں گے ارسال
کریں گے۔

(۱۵) سال ماسبق میں اُن کے ضلع
میں صحت عامہ اور ٹیکہ اندازی کی جو کیفیت
تھی اس کے متعلق ہر سال یکم دسمبر سے
قبل ایک دلچسپ اور مکمل رپورٹ مقررہ
سالانہ تختہ جات اعداد و شمار کے ساتھ
ناظم طبابت و صحت عامہ کی خدمت میں
بھیجا کریں گے۔

16. He will forward the reports and recommendations made by the Sanitary Inspectors and Amins employed by the Municipality or Town Committee to the President with his remarks.

17. He will govern and superintend the movements of travelling dispensaries in charge of Assistant Health Officers in his district. Orders to Assistant Health Officers should be in writing and dated. These orders are to be acknowledged in writing and dated by the Assistant Health Officers.

18. He will see that the travelling dispensaries are always carefully looked after, kept fully equipped and utilized to their fullest extent, for the benefit of the public.

19. He will arrange a monthly tour programme for all the sanitary subordinates

(۶) سرسہ صفائی یا ٹاؤں کمیٹی کے مقرر کردہ سینٹری انسپکٹرن اور امین کی مرسد ریپورٹیں اور سفارشات انہی تجویز کے ساتھ میجر مجس کو ارسال کر دیں گے

(۷) دو خانہ جات دورہ جو ان کے ضلع کے مددگار ہتہ آفسران کے تحت ہیں ان کی نقل و حرکت کی نگرانی اور انتظام کریں گے۔ مددگار ہتہ آفسران کو احکام تحریری بصرحت تاریخ دے جائیں گے۔ جن کے پیچھے کی رسید بھی تحریری ہوگی۔ اور مددگار ہتہ آفسران رتاریخ درج کر دیں گے۔

(۸) اس امر کا خیال رکھیں گے کہ دو خانہ جات دورہ کی بااحتیاط نگہداشت کی جاتی ہے ان کے لئے جملہ سامان کامل طور پر فراہم کیا جاتا ہے اور وہ رفاہ عام کے لئے پوری طرح استعمال کی جاتی ہیں۔

(۹) اپنے جملہ ماتحتین مظان صحت کے لئے ماہوار دورہ کا پروگرام مرتب

under him and see that such programmes are strictly adhered to. He will appoint Headquarters for his Health Sub-Inspectors.

20. He will forward copies of tour programmes of Assistant Health Officers and Health Inspectors, to the Revenue and Police Officers of the area to be visited, with a request for assistance for their tours, and to enable them to check the registers maintained by the Patels relating to Births, Deaths, Vaccination and Epidemic Complaints received against Police Patels for failure to record births and deaths accurately and promptly, and for failure to report the outbreaks of epidemic diseases will be forwarded with his remarks to the First Taluqdar and the District Superintendent of Police of the District. Serious cases will be reported to the Director of Medical and Public Health Department.

کریں گے اور اس کا التزام رکھیں گے کہ اس پر سخت یا بندی سے عمل کیا جائے۔ اپنے ماتحت ہلت سب انسپکٹران کے لئے مستقر (ہیڈ کوارٹر) تجویز کریں گے۔

(۲۰) مددگار ہلت آفیسران اور ہلت انسپکٹران کے پروگرام دورہ کی نقل اُس درخواست کے ساتھ مقام دورہ کے آفیسران پولیس اور مال کو روانہ کر دیں گے کہ اُن کو جہین دورہ امداد دیجائے تاکہ پیدائش و ممات ٹیکہ برآری اور امراض و بانی کے متعلق جو رجسٹرات ٹیلیوں کے پاس رکھتے ہیں اُن کی تنقیح کی جاسکے پیدائش اور اموات کے صحیح اور فی الفور اندراج میں کوتاہی کرنے اور تیوہ امراض و بانی کی رپورٹ پیش کرنے میں غفلت برتنے کی نسبت جو شکایتیں ٹیلیوں کے خلاف وصول ہونگی وہ اُن کو اپنی رائے کے ساتھ اول تعلقدار ضلع اور مہتمم کو توالی ضلع کو بھیج دیں گے۔ اہم معاملات کی رپورٹ ناظم طبابت و صحت عامہ کو ارسال کرنی ہوگی۔

21. For journeys in his own jurisdiction the District Health Officer is authorized to sanction within the allotment the travelling allowance bills of all the employees under him. For the accuracy of the bills, the District Health Officers will be held personally and financially responsible.

22. At least four days before the appointed date he will personally visit the site of important fairs and festivals in his district, or send his assistant to make all necessary sanitary arrangements. He or his assistant must remain in sanitary charge until the people have dispersed.

23. He will visit localities where epidemic occurs, and arrange with the help of his staff to combat the further spread of the disease. Where necessary he will ask for assistance from the Revenue and Police Officials.

(۲۱) ملت آفیسر ان ضلع اپنے جملہ ماتحیین کے سر اُس سفر کی بر آورد سفر خرچ تا بعد گنجائش منظور رنے کے مجاز ہوں گے جو ان کے حلقہ کے اندر کیا گیا ہو اور صحت بر آورد کے وہ ذاتی اور مالی طور پر جوابدہ گردانے جائیں گے۔

(۲۲) اپنے ضلع کے اہم میلوں اور تقاریب کے مقامات کا معائنہ تاریخ مقررہ سے کم از کم چار روز قبل خود کریں گے یا اپنے مددگار کو ضروری انتظامات حفظان صحت عمل میں لانے کے لئے بھیجیں گے۔ اور ابنوہ کے منتشر ہونے تک وہ خود یا انکے مددگار انتظامات حفظان صحت کے نگران رہیں گے۔

(۲۳) جن مقامات میں امراض وبائی رونما ہوں وہاں پہنچ کر اپنے عملہ کی مدد سے مرض کی مزید اشاعت کو روکنے کی سعی کریں گے۔ اور جہاں ضرورت ہوگی آفیسران مال و کوٹوالی سے امداد طلب کریں گے۔

24. He will inspect the work of the Assistant Health Officer, the Health Inspectors, the Health Sub-Inspectors, the Deputy Inspectors of Vaccination and the Vaccinators under him. He will depute them for any special duty in connection with epidemics, or where special concentration may be necessary in the district. The steady progress of vaccination should be interfered with as little as possible.

25. He will enquire into and ascertain the causes, origin and distribution of epidemic or special diseases within his district, and devise preventive methods submitting detailed reports to the Director of Medical and Public Health Department.

26. He is authorized to spend in anticipation of sanction up to Rs. 500 in connection with the prevalence of epidemics, details of expenditure

(۲۴) مددگار ہیلتھ آفیسر، ہڈہ انسپکٹران، ہیلتھ سب انسپکٹران، نانڈ ہیچک برار ان اور ہیچک برار ان کے کام کا معائنہ کریں گے۔ اور ان کو انتظامات امراض وبائی کے سلسلہ میں کسی سپیشل ڈیوٹی (Special duty) پر یا ضلع میں ایسے مقام پر جہاں ازدیاد و عمد کی ضرورت ہو متعین کریں گے۔ لیکن جہاں تک ہو سکے عمل ٹیکہ اندازی کے تسلسل میں رخنہ اندازی نہ ہونی چاہیے۔

(۲۵) اپنے ضلع میں امراض وبائی با دیگر خاص امراض کے اسباب آغاز اور اشاعت کی نسبت تحقیق اور توفیق کریں گے۔ اور ان کے انسداد کی تدابیر پر عمل کر کے مفصل اطلاعی کیفیت ناظم طبابت و صحت عامہ کو ارسال کیا کریں گے۔

(۲۶) امراض وبائی کی اشاعت کے زمانہ میں اس خصوص میں پانچ سو روپے تک کا رچہ بامید منظور کر کے مجاز ہیں لیکن

must be sent to the Director of Medical and Public Health Department who will provide funds from the "Diwani allotment" for epidemic diseases. The urgency which necessitates the expenditure must be shown, and the amount expended limited to the immediate necessity. Expenditure on preventive measures in the absence of an epidemic should be forwarded to the Director, Medical and Public Health Department with the recommendation of the Taluqdar.

27. Only in cases of extreme urgency he is allowed to detail Assistant Surgeons and Sub-Assistant Surgeons in charge of dispensaries of the Medical Department for epidemic duty. Such action and the necessity for it must be immediately reported to the Director of Medical and Public Health Department.

یہ لازم می ہو گا کہ اخراجات کے تفصیلی حسابات ناظم طبابت و صحت عامہ کو ارسال ردے جائیں۔ اور ناظم موصوف گنجائش امراض وبائی علاقہ دیوانی سے رقم کی سربراہی کریں گے۔ اس سلسلہ میں اُن وجوہ کا بھی اظہار کر دینا چاہئے جن کے باعث اخراجات ناگزیر ہوں۔ اور رقم متصرفہ کی مقدار اس فوری ضرورت سے مستجاوز نہ ہونا چاہئے امراض وبائی کی عدم موجودگی میں انسدادی تدابیر کے جو مصارف ہوں گے اُن کے حسابات تعلقہ دار ضلع کی رائے کے ساتھ ناظم طبابت و صحت عامہ کو ارسال کرنا چاہئے۔

(۱۲۷) ان کو صرف انتہائی شدید ضروریات کی موجودگی میں دواخانہ جات سررشتہ طبابت کے انچارج اسسٹنٹ اور سب اسسٹنٹ مرخنان کو کارہائے امراض وبائی پر متعین کرنے کی اجازت ہے۔ اس عمل اور لاحقہ ضرورت کی رپورٹ ناظم طبابت و صحت عامہ کو فوراً کرنی چاہئے۔

28. He will as far as possible, persuade the public to carry out his proposals. For such purpose he will educate the public by propaganda on scientific lines. He will discuss sanitary matters with the people during his inspections in a friendly manner, and show them that it is worth their while to follow his directions in the interests of health.

29. He will deliver monthly lectures on epidemic diseases and methods of prevention in English or the local vernacular in Colleges, High Schools and in other places such as town-halls, theatres, etc.

30. He will, when on tour, personally inspect the work of vaccinators and take steps to encourage vaccination.

31. He will personally inspect the children where vaccination has been put off for an

(۲۸) حتی الامکان وہ عوام الناس کو اپنی تجاویز پر عمل کرنے کی ترغیب دیں گے۔ اس مقصد کو حاصل کرنے کے لئے وہ اصول حکمت کے مطابق تبلیغ کر کے عوام کے معلومات وسیع کریں گے۔ اپنے دورہ میں عوام سے دوستانہ طور پر معاملات حفظانِ صحت پر گفتگو کیا کریں گے۔ اور ان پر واضح کر دیں گے کہ ان کی ہدایات پر عمل کرنا خود ان کی صحت کے لئے سودمند ہے۔

(۲۹) ہر ماہ امراضِ وبائی اور ان کی انسدادی تدابیر پر مقامی یا انگریزی زبان میں کالچوں، مدارس، نو قانیہ یا دیگر مقامات مثلاً تھیٹر یا ٹون ہال میں لکچر دیں گے۔

(۳۰) دورہ میں چیکبکس اراں کے کام کا خود معائنہ کریں گے اور ٹیکہ یا بی کی طرف ترغیب دینے کیلئے تدابیر اختیار کریں گے۔

(۳۱) جن مقامات پر ٹیکہ برآری غیر معمولی عرصہ کے لئے ملتوی کر دی گئی

unduly long period, and to satisfy himself as to the necessity for such postponement.

32. He will send immediate intimation to the Health Officer or Medical Officer as the case may be of the place to which unvaccinated children may have been removed.

33. He will be the technical adviser of the Taluqdar and all district officials in all matters of Public Health.

34. He will report in writing to the President, District Board or Municipal Committee or Town Committee the measures he recommends for the improvement of Public Health in his districts. He will in like manner report on epidemics within his district.

35. He will make recommendation to the President of the District Board, Municipality and Town Committee for the provision of disinfection

سجود ہاں اس اتوا کے وجوب کا اطمینان کرنے کے لئے خود مقامی اطفال کا معائنہ کریں گے۔

(۳۲) اگر غیر ٹیکہ زدہ بچے کسی مقام پر منتقل کر دئے گئے ہوں تو اُس کی فوری اطلاع مقامی اتہ آفیسر یا مڈیکل آفیسر کو دینگے۔

(۳۳) صحت عامہ کے جملہ امور میں وہ تعلقدار اور دیگر عہدہ داران ضلع کے فنی مشیر ہوں گے۔

(۳۴) اپنے ضلع میں انتظامات صحت عامہ کی اصلاح کے لئے تجاویز بذریعہ تحریری رپورٹ ڈسٹرکٹ بورڈ یا سونسیل یا ٹاؤن کمیٹی کے میر مجلس کو ارسال کریں گے اور امراض وبائی کی رپورٹ بھی اسی طرح روانہ کیا کریں گے۔

(۳۵) ساز و سامان حفظان صحت اور لوازمات ڈس انفکشن کی سربراہی کے لئے وہ میر مجلس صاحب ڈسٹرکٹ بورڈ صفائی اور ٹاؤن کمیٹی کے پاس

and sanitary equipment. During inspection, he will satisfy himself that all such equipment as well as vaccines, sera, inoculation outfits and disinfectants are in stock.

36. He will work in close co-operation with the Revenue and Local Fund authorities.

37. He will attend the meetings of the District Board or Municipal Committee or Town Committee.

38. When special meetings are held for the consideration of the Local Fund Budget he will review the position as regards Public Health in his district, and will draw the attention of the District Board or Municipal Committee or Town Committee to proposals made for the improvement of Public Health with reference to the ensuing budget. He will submit to the President, District Board or Municipal Committee or Town Committee a programme of sanitary works and improvements a month before the Budget meeting.

نحر یک کریں گے۔ اپنے دورہ میں وہ اس امر کا اطمینان کرے گا کہ اس قسم کا جملہ ساز و سامان اور ویکسین اور ٹیکہ اندازی اور ڈس انفکشن کے آلات ولوازمات اسٹاک میں موجود ہیں۔

(۳۶) آفیسران مال اور لوکل فنڈ سے پوری طرح اتحاد عمل کریں گے۔

(۳۷) ڈسٹرکٹ بورڈ یا میونسپل یا ٹاؤن کمیٹی کے جلسوں میں شریک ہوا کریں گے۔

(۳۸) اُن خاص جلسوں میں جو موازنہ لوکل فنڈ پر غور کرنے کے لئے منعقد ہوں۔ اپنے ضلع کے موجودہ حالات صحت عامہ پر تبصرہ کریں گے اور منظور شدہ موازنہ کے مد نظر ڈسٹرکٹ بورڈ یا میونسپل یا ٹاؤن کمیٹی کی توجہ صحت عامہ کی اصلاحی تجاویز کی جانب معطوف کرانے لگیں گے۔ کارہائے حفظان صحت اور اصلاحات کا مجوزہ دستور العمل موازنہ کمیٹی کے انعقاد سے ایک ماہ قبل میر مجلس ڈسٹرکٹ بورڈ یا صفائی یا ٹاؤن کمیٹی کو ارسال کر دیں گے۔

39. (a) He will give his expert and technical advice on proposals regarding all Public Health matters whether emanating from a Department or a member of the public. He will also advise Taluq Medical Officers in matters of public health whenever consulted.

(b) He will inspect the work of the Local Fund Sanitary Staff and report his opinion to the President.

40. The District Health Officer will supply the Director, with a copy of any important resolution passed by the Board, or Municipal Committee or Town Committee regarding major works in connection with Public Health, and also in connection with minor works if the Medical Member does not agree with the resolution passed by the District Board or Municipal or Town Committees.

(۳۹) - (الف) صحت عامہ سے متعلقہ تمام تجاویز کے متعلق وہ اپنی ماہرانہ فنی رائے دیں گے۔ خواہ وہ کسی سررشتہ یا بلک کے کسی فرد کی جانب سے بیس کی گئی ہوں۔ اور ہیکل آفیسران تعلقہ کو جب کبھی وہ معاملات صحت عامہ میں اُن کے مشورہ کے طالب ہوں مشورہ دیں گے۔

(ب) نوکلفنڈ کے عملہ صفائی کے کام کی تنقیح کر کے اپنی رائے سے میرمجلس متعلقہ کو مطلع کریں گے۔

(۴۰) جب بھی ڈسٹرکٹ بورڈ یا میونسپل کمیٹی یا ٹاؤن کمیٹی صحت عامہ سے متعلق کسی بڑے کام (میجور ورکس) کی نسبت کوئی اہم تجویز یا س کرے تو ہلتہ آفیسر ضلع اس کی نقل ناظم کو ارسال کیا کریں گے۔ اور اگر رکن طبابت کسی ایسے رزلوشن سے اتفاق نہ کرے جو ڈسٹرکٹ بورڈ یا میونسپل یا ٹاؤن کمیٹی نے چھوٹے کاموں (مایزور ورکس) کے متعلق یا س کیا ہے تو اس کی نقل بھی روانہ کریں گے۔

41. The District Health Officer will issue orders to Taluq Medical Officers, who are Members of Taluq Boards or Municipal Committees or Town Committees, that opinion should not be given on important questions of Public Health until the District Health Officer's opinion has been obtained.

42. He is the certifying surgeon under the Factory Act, and will inspect all factories in his district, and will bring to the notice of the Inspector of Factories concerned any sanitary defects in the factories.

43. He will be responsible for the efficient maintenance of all drugs and stores required for the Public Health Staff in his district.

(۴۱) میڈیکل آفیسران تعلقہ کو جو تعلقہ بورڈ یا میونسپل کمیٹی یا ٹاؤن کمیٹی کے اراکین ہیں اس امر کے احکام اجرا کریں گے کہ تا وقتیکہ صحت عامہ کے اہم معاملات کی نسبت ہلت آفیسران ضلع کی رائے حاصل نہ ہو جائے کوئی رائے زنی ہرگز نہ کی جائے۔

(۴۲) وہ قانون کارخانہ جات (فیکٹری ایکٹ) کی رو سے تصدیق کنندہ سرجن ہیں اور اپنے ضلع کے جملہ کارخانہ جات کا معائنہ کریں گے۔ اور وہاں کے انتظامات حفظان صحت میں جو نقائص دیکھیں گے ان سے متعلقہ انسپکٹر کارخانہ جات (Inspector of Factories)

کو مطلع کریں گے۔

(۴۳) اپنے ضلع کے عہدہ صحت عامہ کے لئے جملہ ضروری اشیاء اور سامان (اسٹور) کے عہدگی کے ساتھ رکھنے کے ذمہ دار ہوں گے۔

41. The District Health Officer will draw from the District Treasury the travelling allowance of Health Sub-Inspectors, after checking the bills. The amount must be forwarded with the least possible delay. They should be particular that the travelling allowance bills are not kept pending in their offices.

(۴۴) ہلت سب انسکٹران کے سفر خرچ کے رقوم بعد تنقیح برآوردات خزانہ ضلع سے برآمد کریں گے اور رقوم بعجلت ممکنہ ارسال کردی جائیگی۔ اور یہ خاص طور پر ملحوظ رکھا جائیگا کہ الونس سفر (بعتہ) کے برآوردات اُن کے دفاتر میں زیر تصفیہ نہ رکھے جائیں۔

**Duties and Responsibilities
of Assistant Health Officers,
H.E.H. the Nizam's
Government.**

**فرائض و ذمہ داریاں مددگار
ہلت آفیسران ممالک محروسہ
سرکار عالی**

1. They will work under the guidance of District Health Officer and carry out such orders as the District Health Officer may from time to time issue and they will furnish him with reports and returns and all information which the District Health Officer may deem necessary in addition to those mentioned below.

2. The Assistant Health Officer is in charge of the travelling dispensary, his duties are:—

(i) To deal with outbreaks of epidemic disease.

(ii) to educate the rural public regarding sanitation and infectious diseases by informal talks, lectures, magic-lantern pictures, pamphlets, etc.

(۱) وہ ہلت آفیسران ضلع کی رہنمائی میں کام کریں گے اور اُن احکام کی تعمیل کریں گے جو ہلت آفیسر ضلع وقتاً فوقتاً نافذ کریں اور ہلت آفیسر ضلع کو مسند برہم ذیل کے علاوہ جن رپورٹوں تختہ جات اور اطلاعات کی ضرورت ہو مہیا کریں گے۔

(۲) وہ دوا خانہ دورہ کے انجام دہ رہیں گے ان کے فرائض سب ذیل ہیں:—

(۱) اشاعت امراض وبائی کی صورت میں انتظامات عمل میں لانا۔

(۲) مواضع کے باشندوں کو حفظان

صحت اور امراض متعدی کے متعلق خبر سرکاری گفتگو۔ لکچر۔ تصاویر طلسمی فانوس (میجک لینٹرن) اور رسالہ جات وغیرہ کے ذریعہ تعلیم دینا۔

(iii) to check the registration of births and deaths and the notification of epidemic disease and to report errors, omissions or delay.

(iv) Inspection of Public buildings, wells, drains, slaughter-houses, markets conservancy, etc.

(v) Inspection and checking the work of:—

(1) Health Inspectors.

(2) Health Sub-Inspectors.

(3) Deputy Inspectors of Vaccination.

(4) Vaccinators of the districts.

(vi) to record information of the following in regard to sanitary condition of villages and submit reports to District Health Officers:—

(a) Population, economic, and social condition.

(۳) حیات و موت کے اندراجات کی تنقیح اور امراض وبائی کی اشاعت کا اعلان اور غلطیوں - فروگذاشتوں اور تاخیر کی رپورٹ پیش کرنا -

(۴) پبلک عمارتوں - باؤلیوں - موریوں اور مسلخ صفائی اور مارکٹ وغیرہ کا معائنہ کرنا -

(۵) عملہ ذیل کی کارگزاری کا معائنہ و تنقیح -

(۱) ہیلت انسپکٹران -

(۲) ہیلت سب انسپکٹران -

(۳) ناظر چیچکبران -

(۴) چیچکبران اطفال -

(۶) مواضع کے انتظامات حفظان

صحت کی نسبت مندرجہ ذیل باتیں معلوم کر کے درج یادداشت کرنا اور ہیلت آفیسر ضلع کے پاس رپورٹ پیش کرنا -

(الف) آبادی - اقتصادی اور

معاشرتی حالت -

- (b) General sanitary condition and conservancy. (ب) عام حالات حفظانِ صحت و صفائی۔
- (c) Water-supply and drainage. (ج) آبرسانی اور ڈرینج۔
- (d) Total number of epidemics in recent years of cholera, plague, small-pox and others. (د) گذشتہ چند سال میں ہینڈ - طاعون - اور - چیچک وغیرہ کی کل کتنی وباؤں متاثر ہوئیں۔
- (e) New outbreaks of diseases and the source of infection. (ه) جدید اشاعتِ امراض اور وجہ تفریق۔
- (f) Rat-population, increasing or decreasing. (س) جوہوں کی تعداد میں کمی و اتع ہو رہی ہے یا زیادتی۔ (ص) میریا
- (g) The local condition regarding Malaria, Filariasis, Guinea-worm and Leprosy. (Malaria) فیل پا (Filariasis) رشتہ (Guinea-worm) اور جذام کے لحاظ سے مقامی حالت۔
- (h) Number of un-vaccinated children and recently vaccinated children examined and the results checked, giving the name of the village and the vaccinator. (ط) جن بچوں کو - چیچک کا ٹیکہ نہیں دیا گیا ہے اور جن کو حال میں ٹیکہ دیا گیا ہو ان کے امتحان کے بعد تعداد اور نتائج کی تصدیق بصرحت نام دیات و - چیچکدار۔
- (i) Total number of patients treated in a village and the names of those recommended to seek treatment at a (ع) تعداد میں مریضان جن کا ریمات میں علاج کیا گیا ہے اور ان مریضوں کے نام جن کو کسی برانچ ڈسپنسری یا دواخانہ

branch dispensary
or District Hos-
pital.

3. They will inspect as many places as possible where epidemics have occurred, institute enquiries into the cause of outbreaks, and take timely precautionary measures to combat the further spread of the disease. A full and immediate report should be made in all such cases to the District Health Officer, with all action taken to combat the disease.

4. They will assist in making all arrangements for the sanitary control of all important festivals where more than 2,000 people congregate, and supervise the conduct of such arrangements during the Urses and Jatras.

5. They will pay particular attention to the water-supply in rural areas especially if derived from public wells or reserved tanks. They will report to the District Health

ضلع میں رجوع ہونے کا دستورہ دیا گیا ہو۔

(۳) ایسے مقامات کا جہاں امراض وبائی شائع ہوئے ہوں جہاں تک ہوسکیگا معاونہ کریں گے اور وجہ اشاعت کی نسبت ضروری تحقیقات عمل میں لائیں گے اور مرض کی مزید اشاعت کو روکنے کے لئے تدابیر حفظ ماتقدم بروقت اختیار کریں گے۔ ہر ایسی صورت میں ایک تفصیلی رپورٹ معہ صراحت تدابیر جو انسداد مرض کے لئے اختیار کی گئی ہوں فوراً ہلت آفیسر ضلع کے پاس پیش کی جائیگی۔

(۴) وہ اُن تمام اہم تقاریب میں جہاں (۲۰۰۰) سے زائد لوگ جمع ہوتے ہوں انتظامات حفظان صحت میں مدد دینگے۔ اور اعراس و جاتراؤں کے زمانہ میں ایسے انتظامات کی نگرانی کریں گے۔

(۵) دیہی رقبہ جات میں نظام آب رسانی پر وہ خاص توجہ رکھیں گے خصوصاً جبکہ بانی عام پاؤلیوں یا تالابوں سے لیا جاتا ہو اگر عام

Officer if public wells are not kept in good repair and if the reserved tanks are not properly fenced and kept free from pollution and will take advice to ensure the purity of the water-supply.

6. Except for casual leave sanctioned by the District Health Officer, they will only be absent from their district with the special permission of the Assistant Director of Public Health or the Director, Medical and Public Health Department.

7. They will be held responsible for the safe custody of all Government property in their charge, and will have to make good any loss or damage which may result from undue negligence on their part. They will keep a complete inoculation outfit with a cholera outfit. They must be always provided

باؤلسوں کی محفوظ مرمت کی جاتی ہو۔
تالابوں کے اطرائت اچھی طرح باڈو عیرہ
لگا کر پانی کو خراب اور گندہ ہوئے سے
محفوظ نہ کیا گیا ہو تو وہ اُس کی اطلاع بہت
آفیسر ضلع کو دینگے اور ذرائع آب سانی
کو پاک صاف رکھنے کے متعلق اُن کی
راے حاصل کریں گے۔

(۶) بحر اس صورت کے کہ بہت آفیسر
ضلع نے رخصت اتنا فی منظور کر لی ہو وہ
اپنے ضلع سے صرف دو گارناظم صحت عامہ
ماناظم طبابت و صحت عامہ کی خاص اجازت
حاصل کرنے کے بعد غیر حاضر ہو سکیں گے۔

(۷) ان کی سپردگی میں جس قدر
سرکاری سامان ہو گا اُس کی باقیہاد حفاظت
کرنے کے وہ ذمہ دار رہیں گے اور اگر ان کی
نامناسب غفلت سے کوئی نقصان ہو جائے
یا کوئی شے گم ہو جائے تو وہ اُس کی تلافی
کریں گے۔ وہ اپنے پاس مکمل سپاہان ٹیکہ
اندازی (اناکوییشن اوٹ فٹ) اور مانع
ہیضہ سامان (کارا اوٹ فٹ) رکھیں گے

with sufficient stock of medicines and the following sera:—

- (1) Plague Vaccine.
- (2) Cholera Vaccine.
- (3) Antitetanic Serum.
- (4) Anti-venom Serum.

8. They will assist the local bodies in taking action for the prevention of:—

- (i) Pollution of water.
- (ii) Defilement of the river or river-bed.
- (iii) Deposit of filthy matter in streets.
- (iv) Making hallows or excavations in streets or inhabited areas.
- (v) Growth of prickly-pear.
- (vi) Insanitary drainage from houses.
- (vii) Deposit of or accumulation of offensive matter in uninhabited areas.

اُن کو ادویہ کا کافی اسٹاک اور مندرجہ ذیل تریاق و مواد (سیرا) ہیئتہ میں رکھنا چاہیئے۔

- (۱) ویکسین پلغ طاعون۔
- (۲) ویکسین پلغ ہیضہ۔
- (۳) انٹی ٹیٹانک سیرم۔
(Antitetanic Serum)
- (۴) تریاق قاطع سم۔
(Anti-venom Serum)

(۸) وہ مندرجہ ذیل امور کے تدارک کے انتظامات میں مجالس مقامی کو مدد دیے گئے۔

- (۱) غلاظت آب نو تسیدنی۔
- (۲) غلاظت ندی یا ندی کی تہ۔
- (۳) سڑکوں پر غلیظ اشیاء کا جمع ہونا۔
- (۴) راستوں یا آباد رقبوں میں گڑھے وغیرہ کھودنا۔

- (۵) افزائش جیل سینڈ۔
- (۶) مکانات میں اصول حفظان صحت کے خلاف موریاں بنانا۔

(۷) غیر آباد رقبہ میں متعفن اشیاء کا اکٹھا یا جمع کرنا۔

(viii) Slaughtering animals except at appointed places.

9. They will examine and verify vital statistics by personal investigation and if necessary by house to house enquiry. They will compare the information thus collected with the reports and registers of the patels.

10. They will assist the Police Patels in the proper classification of the causes of deaths, and generally advise as to the correct maintenance of Birth and Death Registers.

11. They will check the Police Patels reports of epidemic disease.

12. They will be helped by the officer in charge of safai staff in examining the conservancy plant in their tours of inspection, and advise the President through the District Health Officer, as to the sufficiency, efficiency and economy

(۸) مقررہ مقامات کے سوا دیگر مقامات پر جانوروں کا ذبح کرنا۔

(۹) حیات و موت کے اعداد و شمار کی جانچ اور توثیق انہی تحقیقات اور برسرہ رورٹ خانہ نمائندہ دریافت کے ذریعہ کریں گے۔
بر حاصل کردہ معلومات کا مقابلہ میٹروں کی رپورٹ اور رجسٹرات سے کریں گے۔

(۱۰) وجوہ اموات کے قسم واری میں راج میں 'ولس' میٹران کی مدد کریں گے۔
بر رجسٹر حیات و موت کو درست رکھنے کی بہت بالعموم مسودہ دیں گے۔

(۱۱) امراض وبائی کے متعلق پولیس میٹروں کی رپورٹ کی تصدیق کریں گے۔

(۱۲) پلانٹ کا معائنہ کرنے میں ان کو عملہ صفائی کے نگران افسر سے مدد لیگی اور مقرر کردہ 'ادنی' ملازمین اور استعمال کے جائیوا لے حفظان صحت کے پلانٹ - (لوازمات و آلات) کے کافی عمدہ اور کم خرچ ہونے کی نسبت میر مجلس

of menial staff employed and of sanitary plant used.

13. They will tour at least 20 days in a month and during periodical visit to Headquarters they will attend the District Health Officer's Office and will arrange their tours, draw pay, travelling allowances and other bills, receive payments, equip for next tour and help the District Health Officer in maintaining proper record of vital statistics, epidemics, sanitary matters, etc.

14. They will maintain a daily diary with a column for notes by other officers of the Department.

15. They will submit the following reports to the District Health Officers:—

(1) All inspection reports.

کو ہلت آفیسر ضلع کے توسط سے مشورہ دیں گے۔

(۱۳) ہر ماہ میں کم از کم بیس روز دورہ کریں گے اور مستقر پر معینہ ایام حاضری میں ہلت آفیسر ضلع کے دفتر پر حاضر ہو کر ایسے دورہ کی فہرست مرتب کریں گے۔ تنخواہ سفر خرچ اور دوسری برآوردات وصول کریں گے۔ رقومات حاصل کریں گے۔ آئندہ دورہ کے لئے ضروری سامان کی تیاری کریں گے۔ اور حیات و ممات امراض وبائی اور معاملات حفظان صحت کے اعداد شمار بصورت یادداشت (ریکارڈ) قائم رکھنے میں ہلت آفیسر کو مدد دیں گے۔

(۱۴) روزنامہ مرتب کریں گے جس میں ایک کالم دیگر آفیسران سررستہ کے نوٹ کے لئے مختص رہیگا۔

(۱۵) وہ ہلت آفیسر ضلع کے پاس مندرجہ ذیل رپورٹیں پیش کریں گے۔

(۱) معائنہ کی جملہ رپورٹیں

(انسپکشن رپورٹ)

- (2) All epidemic reports. (۲) امراض وبائی کی تمام اطلاعات۔
- (3) Monthly statements of patients treated. (۳) ماہانہ تختہ مریضان جن کا علاج کیا گیا۔
- (4) Monthly report of Inspections made regarding births and deaths, vaccination and epidemics. (۴) حیات و ممات مانع حیضک ٹیکہ اندازی اور امراض وبائی سے متعلقہ تمام معاینوں کی ماہانہ رپورٹ۔
- (5) Monthly sanitary reports or extracts from daily diary. (۵) ماہانہ رپورٹ حفظان صحت یا اقباس روزنامہ۔
16. They will be given an imprest of Rs. 50 for emergency use. The accounts must be submitted monthly to the District Health Officer. (۱۶) ان کے پاس (۵۰) روپے بطور ریڈنگی ناگہانی ضروریات کے لئے رکھے جائیں گے جس کا ماہانہ حساب ہلت آفیسر ضلع کے پاس بھیجنا لازمی ہوگا۔
17. They will maintain and keep up to date all registers in their charge, and also the stock register. (۱۷) وہ اپنے پاس کے جملہ رجسٹرات اور اسٹاک رجسٹر کے اندراجات باضابطہ اور بروقت کیا کریں گے۔
18. They will have the right to attend meetings of the Taluq Boards. (۱۸) مجالس تعلقہ بورڈیں ان کو شرکت کا حق حاصل رہیگا۔

Duties and Responsibilities of Health Inspectors.

1. They will be under the orders of the District Health Officer.

2. They will maintain a daily diary which must be open to the Assistant Director of Public Health, District Health Officers and Assistant Health Officers at the time of their inspection or at any time when they may think necessary to call for it.

3. They will examine and verify village vital statistics not by merely examining the registers, but by personal investigation and house to house inquiry, and by checking the information thus collected with the entries made in the register.

4. Their Headquarters will be the district Headquarters and in addition to looking after their own areas they may on order of the Health Officer inspect the work of the Health

فرائض و ذمہ داریاں ہلت انسپکٹران

(۱) وہ ڈسٹرکٹ ہلت آفیسران

کے ماتحت رہیں گے۔

(۲) وہ ایک روزنامہ رکھیں گے

جس کو مددگار ناظم صحت عامہ، ڈسٹرکٹ ہلت آفیسران اور مددگار ہلت آفیسران بوقت دورہ معائنہ کر سکیں یا جس وقت مناسب سمجھیں طلب کر سکیں۔

(۳) مواضعات کے اعداد و ایش

واموات کی تنقیح و توثیق صرف رجسٹرات کے معائنہ ہی سے نہیں بلکہ گھر گھر جا کر ذاتی تحقیقات کر کے کریں گے اور اس طرح جو معلومات حاصل ہوں گی ان کا مقابلہ رجسٹرات مذکور کے اندراجات سے کریں گے۔

(۴) اُن کا صدر مقام مستقر ضاح

ہو گا لیکن ہلت آفیسر کے حکم پر اپنے حلقہ کی نگرانی کے علاوہ ہلت سب انسپکٹروں

Sub-Inspectors and their records, and report on their work and conduct.

5. They will keep the postal authorities regularly informed regarding their movements so that there may not be any delay in the delivery of official letters addressed to them.

6. They will keep wrappers and envelopes as evidence of late receipt when they receive any official letters late from any authority.

7. They will prepare and submit punctually all daily, weekly and monthly returns and reports which may be prescribed from time to time by the District Health Officer.

8. They will give lectures on general sanitation and the causes and methods of prevention of epidemic diseases to villagers in rural areas on their tours by collecting them in the evenings. They will carry on

کے رجسٹرات اور ان کے کام کا معائنہ کر کے ان کے رویہ اور کارگزاری کی نسبت رپورٹ پیش کر سکیں گے۔

(۵) وہ آفیسرانِ مہ کو اپنے نقل و حرکت سے باقاعدہ باخبر رکھیں گے تاکہ ان کے موسومہ سرکاری مراسلات کے اُن تک پہنچنے میں تاخیر نہ ہو۔

(۶) اگر کسی عمدہ دار کا مراسلہ ان کے پاس دیر میں پہنچا ہے تو وہ لفافہ جات اور کمر بندوں کو بدیرو صوبائی کے ثبوت کے طور پر محفوظ رکھیں گے۔

(۷) روزانہ ہفتہ واری اور ماہواری تختہ جات اور ایسی رپورٹیں جو ہلت آفیسر ضلع وقتاً فوقتاً تجویز کریں گے وقت پر تیار کر کے روانہ کریں گے۔

(۸) دورہ کے زمانہ میں باشندگانِ قریہ جات کو بوقتِ شام مجتمع کیا کریں گے اور اصولِ حفظانِ صحت اور اسباب و طریقِ اندفاعِ امراض و بائی کے موضوع پر تقریر اور تقسیم کریں گے نیز اپنے حدود

their propaganda work in their ranges.

9. They must be able to speak and write Urdu, they have to pass the Zabandani examination of the Medical Department within a period of three years of appointment.

10. They will inspect Public Institutions such as Sarais, Chowdies, Hotels, Restaurants, Eating houses, Tea-shops, Dairies, Bakeries, Butcher shops, Milk shops, Sweetmeats shops, Slaughter-houses, Guds, etc., etc., and report on their sanitary condition to the District Health Officer.

11. They will submit immediate reports to the District Health Officer on fresh outbreaks of epidemic disease or undue mortality occurring in any village and take measures

میں دیگر اقسام کے (پرو-گنڈا) تبلیغی کام بھی جاری رکھیں گے۔

(۹) اُن کو اُردو بولنے اور لکھنے کی مہارت ہونا چاہیے اور تاریخ تقرر سے (۳) سال کے اندر ان کو محکمہ طبابت کے امتحان زبانہ انی میں کامیابی حاصل کرنی پڑیگی۔

(۱۰) اُن کو چاہیے کہ وہ ادارہ جات عامہ مثلا سرائوں، جاڑیوں، ہوٹلوں، رستورانٹ، طعام گاہوں، چائے خانوں، ڈائریوں، دوکانات بخت ویز (بیکری)، دوکانات تصابان، دوکانات شیر، دوکانات شیرینی، مذابح، گدہ وغیرہ کا معائنہ کر کے ان کے حالات کی نسبت حفظان صحت کے لحاظ سے ہلت آفیسر ضلع کو رپورٹ کریں۔

(۱۱) کسی وبائی مرض کی جدید اتساعت یا کسی قصبہ میں غیر معمولی طور پر زیادہ اموات واقع ہونے کی صورت میں ہلت آفیسر ضلع کے پاس فوری رپورٹ بھیجینگے اور

for their prevention and suppression.

12. Health Inspectors holding a certificate of competence will give anti-plague and anti-cholera inoculations whenever necessary.

13. They will see that they are provided in advance with 20 lbs. of Potassium Permanganate and are authorised to use this for disinfection of wells and other purposes.

14. They will inspect the sanitary condition in towns and villages and take all possible steps by personal efforts to improve the sanitary condition including the disposal of night soil and refuse.

15. They will inspect the water-supply with regard to the following points:—

- (i) Whether the water-supply is sufficient for the village,

ان شکایات کا دفعیہ اور سدباب کرنے کے لئے
تدابیر اختیار کریں گے۔

(۱۲) جن ہلت انسپکٹران کے پاس
صدائق نامہ اساتذت موجود ہے وہ بوقت
ضرورت مانع طاعون اور مانع ہیضہ ٹیکہ
دینگے۔

(۱۳) وہ قبل از وقت (۲۰) ہونڈ
یوٹاسیم یرمیگنٹ بالا اترام حاصل کریں گے
اور اس امر کی اجازت بھی لے لیں گے کہ وہ
اس دوا کو باؤلیوں کے صاف کرنے میں
یاد دیگر اغراض کے لئے صرف کر سکیں۔

(۱۴) وہ قصبات اور قریہ جات کے
حالات حفظان صحت کا معائنہ کریں گے اور
وہاں کے حالات صحت کی اصلاح نیز بول
و براز اور فضلہ (کھرا) وغیرہ کی صفائی
کے لئے خود اپنی مساعی سے تدابیر اختیار
کریں گے۔

(۱۵) آب نوشیدنی کا معائنہ مندرجہ
ذیل امور کے لحاظ سے کریں گے۔

(۱) آیا تمام موضع کے لئے آب نوشیدنی
کی مقدار کافی ہے۔

(ii) whether the water-supply is properly protected from pollution and call attention to any sources of contamination,

(iii) whether the well is according to approved design,

(iv) whether new wells should be dug or whether existing wells should be repaired and improved,

(v) make any other proposals for improving the supply of drinking water in villages visited.

They will submit monthly to the District Health Officer a report on the above.

16. They will inspect articles of food offered for sale in any village and with the help of the local officials prevent as far as possible sale of food unfit for human consumption.

(۲) آما آب و تسیدنی غلاط سے محفوظ رکھا جانا ہے۔ جو حیرتیں یا ذرائع باعث غلاط ہونگی اُن پر توجہ دلائیں گے۔

(۳) آیا باؤلی منظرہ نمونہ کی ہے۔

(۴) آیا نئی باؤلیاں تیار کرائی جائیں یا موجودہ باؤلیوں کی مرمت اور اصلاح کی جائے۔

(۵) جن قصبات-قریہ جات میں دورہ کیا گیا ہے وہاں کی رسد آب کی اصلاح کے متعلق تجاویز پیش کی جاویں۔

ہر ماہ مفصلہ بالا امور کی نسبت ڈسٹرکٹ ہیلت آفسر کے یا س ریورٹ ارسال کریں گے۔

(۱۶) مواضعات میں جو اشیاء خوردنی فروخت ہوتی ہیں اُن کا معائنہ کریں گے اور جو اشیاء ناقابل استعمال ہونگی اُن کے فروخت کو بامداد آفسران مقامی حتی الامکان روک دیں گے۔

17. They will bring to the notice of the District Health Officer all offensive and dangerous trades indulged by the villagers.

18. They will be responsible,

(i) to investigate the source of infection of all epidemic diseases,

(ii) to notify the public,

(iii) to take immediate steps for evacuation, isolation, disinfection, inoculation, etc.,

(iv) to take measures to arrest the further spread of such diseases,

(v) to submit a detailed report to the District Health Officer.

19. They will persuade local officials to fill or drain all pits made by the villagers in

(۱۷) اگر باشند گان مواصلات کے

خطرناک یا ضرر رساں کاروباریں دیہی
باشندے دیہی لینے ہونگے تو اس کی
اطلاع ہلت آفسر ضلع کو دینگے۔

(۱۸) حسب ذیل امور کی ذمہ داری

اُن پر رہیگی۔

(۱) اس امر کی تحقیق کرنا کہ امراض

دیہاتی کی ابتدا کہاں سے ہوئی۔

(۲) عوام الناس کو اس کی اطلاع

دینا۔

(۳) تنزیہ مکانات، علوری مریض،

دس انفکشن اور ٹیکہ اندازی وغیرہ کے
فوری انتظامات کرنا۔

(۴) مذکورہ امراض کی مزید اتساعت

کی روک تھام کے تدابیر اختیار کرنا۔

(۵) ہلت آفسر ضلع کے پاس مفصل

ریپورٹ ارسال کرنا۔

(۱۹) مواصلات میں مقامی افسروں

کو ترغیب دینگے کہ ایسے گڑھے یا تالوں کو

the inhabited area as these form breeding places for mosquitoes.

20. Except in the rainy season they will be on tour not less than 20 days in each month. They will tour at any time on reports of epidemics or when ordered by the District Health Officer.

21. They are strictly prohibited from doing any hospital work or routine office work.

22. They will pass an examination in First-aid so that they may be supplied with necessary materials for assisting villagers as necessity may arise. They are also permitted to take common drugs and distribute Tabloids, etc., gratis for common ailments under the direction of the Assistant Health Officer.

بند کرادیں جو مقامی باشندوں نے آبادی کے اندر رہنائی ہیں کیونکہ اُن میں مجھری پیدا ہوتے ہیں۔

(۲۰) ماستثناء موسمِ باراں وہ ہر ماہ میں دورہ کریں گے جن کی میعاد (۲۰) دن سے کم ہوگی لیکن امراضِ وبائی کی اطلاع ملتے ہوئے یا ہلت آفسر ضلع کا حکم موصول ہو نیکی صورت میں بلا قید زمانہ ہر وقت دورہ کرنا پڑے گا۔

(۲۱) ان کو دو خانہ کا کام یا دفتر کے روزمرہ کے دوسرے کام کر نیکی سخت ممانعت ہے۔

(۲۲) وہ فرسٹ ایڈ کے امتحان میں کامیابی حاصل کر لینے تاکہ ضروری سامان اُن کو دیا جائے کہ بوقت ضرورت دیہی باشندوں کی امداد کر سکیں اُن کو اس امر کی اجازت دیجاتی ہے کہ عام ادویہ ساتھ رکھیں اور قرص وغیرہ معمولی بیماریوں کے لئے حسب ہدایت اسٹنٹ ہلت آفسر مفت تقسیم کریں۔

23. When ordered by the District Health Officer they will attend Uruses and Jatras with a view to making necessary arrangements for general sanitation, conservancy, and protection of drinking water from contamination, and to take immediate steps for the prevention or suppression of epidemic diseases.

(۲۳) ڈسٹرکٹ ہیلت آفسر ضلع جب اُن کو حکم دینگے وہ عرس اور جاترا میں اس غرض سے جائینگے کہ حفظانِ صحت عام صفائی اور آبِ اوتسیدنی کو غلاظت سے پاک رکھنے کے انتظامات اور امراضِ وبائی کے انسداد و اندفاع کی تدابیر عمل میں لائیں۔

Duties and Responsibilities of Health Sub-Inspectors.

1. They will work under the general direction of the District Health Officer.

2. They will reside in and tour in the area allotted to them for sanitary and epidemic purposes.

3. They will disinfect all the wells with potassium Permanganate immediately Cholera occurs or threatens the village.

4. They will impress on the villagers the advantage of timely disinfection of wells in avoiding and arresting epidemic Cholera.

5. They will encourage the villagers to isolate the sick and to evacuate their houses during epidemics of plague and discourage an early return to infected areas. They will discourage the people from enter-

فرائض و ذمہ داریاں ہلت سب انسپکٹران

(۱) ہلت انسپکٹران - ہلت آفیسر
ضلع کی عام رہنمائی میں کام کیا کریں گے۔

(۲) یہ لوگ اُس رقبہ میں قیام اور
دورہ کریں گے جو حفظان صحت اور امراض
وبائی کی ضروریات کے مد نظر ان کے لئے
مختص کیا گیا ہو۔

(۳) جس موضع میں ہینضہ شائع ہو یا
شائع ہونیوالا ہو فوراً وہاں کے تمام باؤلیوں
کی اصلاح بوٹا شیم پرمیگنٹ سے کریں گے۔

(۴) دیہاتیوں کو یہ سمجھائیں گے کہ
بر زمانہ ہینضہ باؤلیوں کو بروقت فوراً پاک
کر نیسے مرض کے اند فاع اور انسداد میں
بست مدد ملتی ہے۔

(۵) دیہاتیوں کو ترغیب دیں گے کہ
بر زمانہ طاعون بیماروں کو علیحدہ رکھا جائے
اور مکان کا تخلیہ کر دیا جائے۔ متاثرہ
مقامات میں جلد واپس آنے اور ایسے مقامات

taining friends and relatives from infected areas and will encourage inoculation. As far as possible they will assist the people to procure hutting materials and to obtain inoculation. They will carry out disinfection and fumigation under the orders of the District Health Officer.

6. They will maintain a daily diary of work done and send a weekly report to the District Health Officer.

7. They will enquire into and ascertain the causes, origin and distribution of epidemic diseases within their areas and report forthwith to the nearest Medical Officer and to the District Health Officer.

8. They will make systematic inspections of all the villages in their jurisdiction and find out the conditions injurious to Public Health existing in such villages.

کے رہنے والے دوست اور اقربا کو یہاں مہمان رکھنے سے انکو بازار کھینگے اور ٹیکہ لینے کی ترغیب دینگے۔ حتی الامکان لوگوں کو جھونپڑیوں کا سامان حاصل کرنے اور ٹیکہ لینے میں مدد دینگے اور ہلت آفسر ضلع کے احکام کے بموجب وہ مکانات کی بذریعہ ادویات و بخور صفائی (ڈس انفکشن اور فیو میگیشن) کر لینگے۔

(۶) وہ انجام یافتہ کام کا ایک روزنامہ رکھینگے اور ہفتہ وار سی رپورٹ ہلت آفسر ضلع کو روانہ کیا کریں گے۔

(۷) وہ اپنے اپنے حلقوں کے امراض کے اسباب آغاز اور انکی اشاعت کی تفتیش و تحقیق کریں گے اور فوراً قریب ترین مقام کے مڈیکل آفسر اور ہلت آفسر ضلع کو اس کی رپورٹ کریں گے۔

(۸) اپنے اپنے حلقہ کے تمام مواصلات کا سلسلہ وار معائنہ کریں گے اور ان مقامات کی ان تمام باتوں کو دریافت کریں گے جو صحت عامہ کے لئے مضر ہو سکی۔

9. They will pay special attention to the water-supply and to the disposal of the refuse and take all possible steps by personal efforts and through local patels to improve rural sanitation.

10. They will attend, whenever required, Uruses and Jatras with a view to making necessary arrangements for conservancy and for the protection of drinking water. They will carry out the orders of the District Health Officer or the Assistant Health Officer in the prevention and suppression of epidemic diseases.

11. They will bring to the notice of the Tahsildar of the locality and the District Health Officer any cases of exposure for sale of food unfit for consumption, or any other matter of serious import with reference to public health,

(۹) مواضع کے نظام آب نوشیدنی اور کچر اصائع کرنے کی تدابیر کی طرف خاص توجہ کریں گے اور ذاتی کوششوں اور مقامی ٹیلوں کی امداد سے دیہی انتظامات حفظان صحت کی اصلاح کرنے کے لئے ہر ممکن طریقہ اختیار کریں گے۔

(۱۰) وہ اعراس اور جاترا میں صفائی اور محافظت آب نوشیدنی کے ضروری انتظامات عمل میں لانے کی غرض سے عند الحکم جائینگے اور امراض وبائی کا انتظام والنسداد کرنے میں ہلت آفسر ضلع یا مددگار ہلت آفسر ضلع کے احکام کی تعمیل کریں گے۔

(۱۱) بازار میں اگر کوئی ناقابل استعمال خوردنی شے رکھی ہوئی فروخت ہوتی ہو یا کوئی اور معاملہ صحت عامہ کے نقطہ نظر سے خاص اہمیت رکھتا ہو تو مقامی تحصیلدار اور ہلت آفسر ضلع کو اس کی طرف توجہ دلائینگے۔

12. They will persuade all persons showing unwillingness to accept vaccination, and explain its importance during their tours to the various villages. When ordered by the District Health Officer, they will vaccinate children within their Circle and carry out all the duties of a vaccinator while so employed but will not be provided with any extra staff.

(۱۲) جو لوگ ٹیکہ لینے سے متعذر ہوں گے
 اُن کو راضی کریں گے اور مختلف مواضعات
 میں دورہ کرتے وقت لوگوں کو اُس کی
 اہمیت سمجھائیں گے ہلت آفر ضلع جب
 حکم دیں گے۔ وہ اپنے اپنے سرکل میں بچوں کو
 ٹیکہ مانع حینک دیں گے اور ایسی صورت
 میں حینکبرار کے جملہ فرائض انجام دیں گے۔
 لیکن اُن کو اس کے لئے کوئی زاید عمدہ
 نہ ملے گا۔

**Duties and Responsibilities
of a Deputy Inspector of
Vaccination.**

1. On appointment he will be sent to the Central Vaccine Depôt for a Refresher Course. Confirmation of appointment will depend on a certificate of efficiency signed by the Superintendent of the Vaccine Depôt.

2. He will work under the orders of the District Health Officer.

3. His chief duties are:—

- (i) to maintain discipline amongst the staff of Vaccinators and to control their work,
- (ii) to inspect and report on the work of Vaccinators in his district in order to test its quantity and quality. He is bound to inspect enough of the work

فرائض و ذمہ داریاں ناظر
چیچکبراران (ڈپٹی انسپکٹر
آف ویاکسینیشن)

(۱) بعد تقرر مزید تعلیم (رفرشر کورس) کیلئے
(Central Vaccine
Depôt) سنٹرل واکسن ڈپو
میں بھیجے جائینگے جہاں کے سیرٹیفکیٹ
کے صداقت نامہ ایاقا پران کا استقلال
عمل میں آئیگا۔

(۲) وہ ہلت آفسر ضلع کے تحت کام
کریں گے۔

(۳) ان کے خاص فرائض حسب ذیل

ہیں۔

(۱) عملہ چیچکبراران میں انتظام تائیم
رکھنا اور ان کے کام کی نگرانی کرنا۔

(۲) اپنے ضلع کے چیچکبراروں کے کام
کا معائنہ کرنا اور کام کی مقدار اور نوعیت
کا اندازہ کرنے کے لئے اس کے متعلق
رپورٹ پیش کرنا۔ اپنے ضلع کے چیچکبراروں

of every Vaccinator of his district, while actually engaged in vaccination, to see that the Vaccinator follows the technique and rules for vaccination correctly,

- (iii) to make every effort to secure vaccination of all unprotected children and adults in his jurisdiction,
- (iv) to approve the tour programmes for vaccinators, and get them sanctioned by the District Health Officer,
- (v) to inspect the birth and death registers of the villages visited, and check their accuracy by house to house enquiry, and to see that the local Vaccinator is provided with the returns of births in his area,
- (vi) to inspect personally villages which are badly affected by small-pox, and to send an immediate

کے کام کا کافی حد تک اُس وقت معائنہ کرنا جبکہ وہ حقیقتاً ٹیکہ اندازی میں مصروف ہوں تاکہ یہ معلوم ہو سکے کہ آیا وہ قواعد چیکبکری اور اصطلاحات فن کے بموجب عمل کر رہے ہیں یا نہیں۔

(۳) اس امر کی ہر ممکن کوشش عمل میں لانا کہ ان کے حلقہ کے جملہ غیر محفوظ بچوں اور بالغ لوگوں کے ٹیکہ نکالا جائے۔

(۴) چیکبکری ان کے پروگرام دورہ کو منظور کر کے ہلت آفسر صاحب ضلع کی منظوری حاصل کرنا۔

(۵) اُس وقت معائنہ موانعات وہاں کے رجسٹریڈ اٹس و اموات کی تفتیش کرنا اور خانہ بجانہ تحقیقات کر کے اس کی صحت کی جانچ کرنا اس کا التزام رکھنا کہ مقامی چیکبکری کو اس کے حلقہ کی زیگیوں کے اعداد ہم پہنچائے جاتے ہیں۔

(۶) اُن دیہات کا چشمہ و معائنہ کرنا جن میں مرض چیکبکری طرح پھیل گیا ہے اور اس کی فوری رپورٹ ہلت

report to the District Health Officer, and to assist the Vaccinator in protecting the people by general vaccination,

(vii) to report, to the District Health Officer, any delay on the part of patels in bringing to notice the existence of small-pox,

(viii) to see that vaccinators are provided with lymph and equipment and that they work efficiently,

(ix) to carefully examine the vaccination registers and see that they are accurate and up to date,

(x) to maintain a daily diary of work done and to forward a weekly diary to the District Health Officer in the form prescribed.

4. He will maintain a register of the villages and hamlets visited by him and will

آفسر ضلع کو بھیجنا اور لوگوں کے تحفظ کے لئے عام ٹیکہ اندازی میں، چیچکبار کی امداد کرنا۔

(۷) ہلت آفسر ضلع سے اس امر کی رپورٹ کرنا کہ کسی پٹیل نے مرض چیچک کی اطلاع دینے میں تاخیر کی ہے۔

(۸) اس امر کا التزام رکھنا کہ چیچکباروں کو مواد (لفٹ) اور دیگر لوازمات بہم پہنچائے جاتے ہیں اور وہ قابلیت سے کام انجام دیتے ہیں۔

(۹) (ویاکسینیشن) چیچکباری کے رجسٹرات کا باضابطہ معائنہ کرنا اور اس امر کی نگرانی رکھنا کہ ان میں اندراجات صحیح اور بروقت کئے جاتے ہیں۔

(۱۰) کارگزاری کا ایک روزنامہ رکھنا ہلت آفسر ضلع کو معینہ فارم پر ہفتہ واری رپورٹ ارسال کرنا۔

(۴) وہ اپنے تمام معائنہ کردہ مواضع اور کھیرٹوں کا ایک رجسٹر

enter the population, the date of the visit, whether accompanied by the Vaccinator, and the number of children vaccinated and inspected. This register should be available to all the Inspecting Officers.

5. He will keep the postal authorities regularly informed regarding his movements so that there may be no delay in the delivery of official letters. He will keep all envelopes of letters not received in time and make the necessary complaint to Postal authorities through the District Health Officer.

6. He will submit all returns prescribed under the Vaccination Bye-Laws to the District Health Officer, regularly in the proper time.

7. His Headquarters will be the District Headquarters and he will arrange his tours as far as possible so that cases vaccinated during the month

رکھیں گے۔ جس میں مردم شماری، تاریخ معائنہ نیز یہ امر کہ آیا جیکبکمر اساتھ تھا یا نہیں اور ان بچوں کی تعداد جن کے ٹیکہ نکالا گیا اور جن کا معائنہ کیا گیا ہے درج کریں گے یہ رجسٹر جمعہ معائنہ کنندہ آفسران کے ملاحظہ کے لئے موجود رہیگا۔

(۵) عمدہ داران ٹیکہ کو اپنے نقل و حرکت سے برابر آگاہ کرتے رہیں گے تاکہ سرکاری مراسلات کے پہنچنے میں تعویق نہ ہو اور جو مراسلہ بروقت نہ پہنچیں گے اُن کے لغافوں کو بحفاظت رکھکر ہلت آفسر ضلع کے ذریعہ عمدہ داران ٹیکہ کے پاس شکایت پیش کریں گے۔

(۶) جمعہ تختہ جات جو ذیلی قواعد جیکبکمر اری کے تحت مقرر کئے گئے ہیں ہلت آفسر ضلع کو بلا ناٹھ ٹھیک وقت پر ارسال کریں گے۔

(۷) اُن کا مستقر مستقر ضلع ہوگا اور وہ حتی الامکان اپنے دورہ کا پروگرام اس طرح مرتب کریں گے کہ ایک ماہ کے

are inspected before the 25th of the next month, and the monthly report submitted to the Health Officer within the prescribed date. He will be at the Headquarters from about the 25th to the 5th, so that his monthly papers are prepared under the direct supervision of the District Health Officer.

8. He will report to the District Health Officer when vaccination is backward in any village visited, noting the probable cause of the backwardness.

9. He will report to the District Health Officer all cases of vaccinations that have been put off for an unduly long period by Vaccinators.

10. He will report all outbreaks of small-pox at once to the District Health Officer and to the nearest Officer belonging to Medical or Public Health Department, and if he receives

ٹیکہ زدہ لوگ آئندہ ماہ کی (۲۵) تاریخ کے قبل معائنہ کئے جاسکیں اور ماہواری رپورٹیں ہلت آفسر ضلع کو تاریخ معینہ کے اندر ارسال کیجاسکیں تقریباً ۲۵ - سے ۵ - تاریخ تک وہ اپنے مستقر پر رہینگے۔ تاکہ اُن کے ماہواری کاغذات ہلت آفسر ضلع کی راست نگرانی میں تیار ہوں -

(۸) اگر کسی معائنہ کردہ موضع میں ٹیکہ اندازی کی حالت ابتر ہوگی تو اس کی رپورٹ قرین قیاس وجوہ کی صراحت کے ساتھ ہلت آفسر ضلع کو ارسال کریں گے۔

(۹) جن صورتوں میں جیسکبراووں نے نامناسب طولانی مدت کے لئے ٹیکہ اندازی ملتوی کر دی ہے اُن کی رپورٹ ہلت آفسر ضلع کے پاس بھیجیں گے۔

(۱۰) سیوے جیسک کی رپورٹ ہلت آفسر ضلع اور نزدیک ترین آفسر طبابت یا عہدہ دار صحت عامہ کے پاس فوراً بھیجیں گے اور اگر ایسے امراض وبائی

intimation of the outbreak of any epidemic disease, which he believes to be unreported, he will immediately report the occurrence to the District Health Officer.

11. In cases of emergency he will send Vaccinators to the infected locality to check the progress of small-pox; any such independent action must be immediately reported to the District Health Officer for information. If the outbreak is extensive, he will himself proceed with as little delay as possible to the village infected to stimulate, direct and assist the Vaccinators in their work.

12. He will encourage vaccination among the unprotected infant population in his jurisdiction by means of persuasion and house to house talks during his visit. He will impress on Vaccinators the importance of propaganda.

کے تسامع ہونی کی اطلاع یا بینکے جن کی باتہ ان کے خیال میں اس وقت تک کوئی رپورٹ نہیں۔ بیتس کی گئی ہے تو اس کی اطلاع فوراً ہلت آفسر ضلع کو کریں گے۔

(۱۱) بصورت ضروریات ناگہانی چیخبرداروں کو مرض کے روک تھام کے واسطے مقام متاثرہ پر روانہ کریں گے لیکن ہر ایسے خود مختار نہ فعل کی اطلاع ہلت آفسر ضلع کو فوراً کریں گے اگر اتاعت مرض وسیع ہوگی تو وہ خود بجلت ممکنہ مقام متاثرہ پر جا کر چیخبرداروں کی حوصلہ افزائی کریں گے اور ان کی رہنمائی اور اعانت کریں گے۔

(۱۲) ان کے حلقہ میں جہاں غیر محفوظ طبعی ہوں گے وہاں ٹیکہ اندازی کی ترغیب اس طرح دینگے کہ بحین دورہ خانہ بجانہ جا کر لوگوں کو تفہیم کریں گے اور پروپگنڈا (کار تبلیغ) کی اہمیت چیخبرداروں کے دل نشین کریں گے۔

13. He will see that revaccination is extensively carried out in areas affected with small-pox and get as many persons vaccinated as possible without reference to the minimum prescribed to Vaccinators. If necessary the help of the local official should be requisitioned.

14. He will submit by 15th Azoor an annual report of the work done in his district with statistical statements up to the close of the preceding official year.

15. He will see that each vaccinator in his district is provided with a service book which is to be written up to date at the close of the year.

16. He will submit to the District Health Officer his tour programme, He will arrange

(۱۳) اس امر کا انتظام کریں گے کہ جینک سے متاثرہ رقبہ میں دوبارہ ٹیکہ اندازی وسیع پیمانے پر کی جائے اور جینکبراروں کے لئے جو کم سے کم تعداد مقررہ ہے اُس کا لحاظ رکھ کر بغیر لوگوں کو زیادہ سے زیادہ تعداد میں ٹیکہ دیا جائے اگر ضرورت پیش آئے تو مقامی عمدہ داروں کی اعانت طلب کی جائیگی۔

(۱۴) ان کے ضلع میں جس قدر کام انجام پائینگے اُن کی سالانہ رپورٹ اور اس کے ساتھ ختم سال ماسبق تک کے اعداد و شمار تختہ کا ۱۵۔ آذر تک روانہ کریں گے۔

(۱۵) وہ اس امر کا انتظام رکھیں گے کہ ان کے ضلع کے ہر جینکبرار کا کارنامہ (سرویس بک) موجود رہتا ہے اور اختتام سال پر اُس میں پورے اندراجات تاریخ واری کے جاتے ہیں۔

(۱۶) اپنے دورہ کا پروگرام بہت آفسر ضلع کو ارسال کریں گے اور دورہ

his tour in such a way that the work of every Vaccinator is regularly inspected.

17. He will give at least 24 hours' notice in writing to the Patel of his intention to inspect the vaccinated children of a village.

18. He will keep a record of all unvaccinated children in the village visited and direct the Vaccinator concerned to vaccinate them forthwith.

19. He will similarly record for the information of the District Health Officer and disobedience of orders, neglect, carelessness or indifference in the work of a Vaccinator.

20. He will not employ Vaccinators to do any private work.

اس طرح ترتیب دینگے کہ چیچکبرار کا کام باقاعدگی کے ساتھ معائنہ کیا جاسکے۔

(۱۷) موقع کے ٹیل کو کم از کم (۲۴) گھنٹہ قبل اس امر کی تحریری اطلاع دیں گے کہ اُن کا قصد ٹیکہ زدہ بچوں کے معائنہ کرنا ہے۔

(۱۸) معائنہ کردہ قصبہ کے جملہ غیر ٹیکہ زدہ بچوں کی ایک فہرست رکھیں گے اور چیچکبرار متعلقہ کو ہدایت کریں گے کہ اُن کے فوراً ٹیکہ نکالا جائے۔

(۱۹) اسی طرح مفوضہ کام میں چیچکبرار ان غفلت، حکم عدولی، لاپرواہی اور عدم توجہی کریں تو اس کی بابت ہلت آفسر ضلع کی اطلاع کے لئے یا دواشت تیار کریں گے۔

(۲۰) چیچکبراروں سے ایسا خانگی کام نہ لین گے۔

Duties and Responsibilities of Vaccinators.

1. They are directly subordinate to the District Health Officer and must carry out promptly and carefully any instructions or orders received from him or from the Deputy Inspector of Vaccination.

2. They will be appointed to the Headquarters of a Taluq and should not leave the Circle without the written permission of the District Health Officer.

3. They will call on the Tahsildar for assistance in carrying on their work when necessity arises and will not meet any officer of the Public Health Department if on tour in their circles, unless specially called for.

4. They will be provided with a vaccine carrier, 2 lancets, absorbent wool, one wooden holder for vaccine vials, a sterilizing set consist-

فرائض و ذمہ داریاں چیچکبھاران

(۱) چیچکبھاران ہلت آفیسر ضلع کے راست ماسحت ہونگے اور اُن پر لازم ہوگا کہ جو احکام یا ہدایات ہلت آفیسر ضلع بناظر چیچکبھار سے وصول ہوں اُن کی باضابطہ نام فوری تعمیل کیا کریں۔

(۲) چیچکبھاران مسدقہ تعلقہ پر متعین کئے جائینگے اور ہلت آفیسر ضلع کی تحریری جازت کے بغیر اپنے حلقہ سے باہر نہ جائیں گے۔

(۳) جب ضرورت ہوگی مقامی تحصیلدار کے پاس جا کر اپنے کام کی اجرائی کے لئے امداد طلب کریں گے اور تاوقتیکہ عاص طور پر طلب نہ کئے جائیں صحت عامہ کے کسی عہدہ دار سے جو اُن کے سرکل میں دورہ کر رہا ہو گانہ ملیں گے۔

(۴) اُن کو حسب ذیل سامان دیا جائیگا۔

ویکسین رکھنے کا خانہ (ویکسین کیریئر)
ہونشتر۔ اُون جاذب (اپ ساربنٹ اول)

ing of a spirit lamp, and methylated spirit, a box of matches, 2 towels, a cake of soap, one ounce of Boric acid, and a canvas bag with a shoulder strap. They will be responsible for the due care and preservation of such equipment and will be called upon to make good any loss or breakage.

5. The various functions which Vaccinators should discharge are briefly defined as follows:—

(a) Scientific and careful performance of Vaccination operations.

(b) Verification of all birth registers and systematically seeing to the Police Patel's register being completed and signed by him before leaving the place.

ویاکسین کی قلمیں رکھنے کے لئے ایک جوہی خانہ۔ ایک اسٹریلایزنگ سٹینپن اسریٹ لمب اور مٹھلڈ اسپریٹ اور ایک ڈبیہ دیاسلانی۔ دو تووال ایک بٹی صابن۔ ایک اونٹن بورک ایسڈ اور ایک کرچ کا تھیل جس میں انکھانے کا تسہہ لگا ہوگا۔ وہ ان جملہ اشیاء کو مناسب احتیاط سے رکھنے اور ان کی حفاظت کرنے کے ذمہ دار رہیں گے اور گرم گستگی یا ٹوٹ پھوٹ کی تلافی کریں گے۔

(۵) مختلف کام جو چیخکرا انجام دیں گے مختصر آئسب ذیل ہیں:—

(الف) کارہائے چیخکرا اسی احتیاط کے ساتھ باقاعدہ اصول پر انجام دیں گے۔

(ب) جملہ رجسٹرات پیدائش کی تصدیق کریں گے اور ترک معام سے قبل اس امر کا باقاعدہ اطمینان کر لیں گے کہ پولس۔ ٹیلوں کے جملہ رجسٹرات مکمل ہیں اور ان میں ان کے دستخط ثبت کر دیئے گئے ہیں۔

(c) Systematic house to house inspection of the whole town or village for the detection of unregistered births and other unprotected cases.

(d) Proper maintenance of Vaccination registers and records, including a register of unprotected children.

(e) Correct preparation and punctual submission of returns of Vaccinations.

(f) Inspection of general sanitary condition of villages visited.

6. The minimum outturn of work for each vaccinator should be 200 successful vaccinations in a month. He should perform not less than 3,000 vaccinations during the year. The travelling allowance of a vaccinator may be forfeited if he fails to reach the minimum

(ج) پورے قصبہ یا موضع کا خانہ بخانہ سلسلہ وار معائنہ اس امر کی گرفت کرنے کے لئے کریں گے کہ کسی بچہ کی پیدائش درج ہونے سے رہ تو نہیں گئی ہے یا کوئی غیر ٹیکہ زدہ کیس تو موجود نہیں۔

(د) ٹیکہ اندازی کے رجسٹرات اور یادداشتیں باقاعدہ طور پر رکھنے کے جن میں غیر ٹیکہ زدہ بچوں کا رجسٹر بھی شامل ہوگا۔

(ه) تختہ جات ٹیکہ اندازی کو صحیح صحیح مرتب اور وقت پر ارسال کیا کریں گے۔

(و) مواضعات میں دورہ کرتے وقت وہاں کے عام حالات حفظان صحت کا معائنہ کریں گے۔

(۶) ہر جمعیہ کے ارکان کی کم از کم ماہانہ کارکردگی دو سو بچوں کی کامیاب ٹیکہ اندازی ہونی چاہیے اور اس کو سال میں اتنا (۳) ہزار ٹیکہ نکالنا چاہیے اگر مقررہ ماہانہ اقل تعداد پوری نہ کی جائیگی تو جمعیہ کے ارکان کا حصہ الونس سفر قابل ضبطی ہوگا

fixed during a month. Vaccinators showing want of zeal or unsatisfactory and persistent poor work, will be denied annual increments.

7. They will tour according to the programme approved by the Deputy Inspector of Vaccination and sanctioned by the District Health Officer.

8. They will send a notice to the village patel 2 days before visiting a village to ensure his presence on the days of vaccination and result checking. The collection of children from the neighbouring villages is strictly forbidden.

9. They will take sufficient lymph with them for the vaccination of all children when proceeding to a village and vaccinate without any loss of time. The minimum supply on any one occasion will be one hundred doses, and this quantity will be supplied as often as required.

اور اگر وہ اپنی سرگرمیوں میں کمی ظاہر کریں گے، یا انہوں نے اطمینان بخش اور متواتر اچھا کام نہ کیا ہو گا یا کام غیر اطمینان بخش طور پر بار بار خراب کریں گے تو سالانہ ترقی سے محروم کر دئے جائیں گے۔

(۷)۔ چیفکبراران اُس پروگرام کے مطابق دورہ کریں گے جو ناظر۔ چیفکبراران نے سینڈاور ہلت آفیسر ضلع نے منظور کر لیا ہے۔

(۸) قصبہ میں پہنچنے سے دو روز قبل مقامی۔ ٹیلوں کو اطلاع بھیج دیں گے تاکہ وہ ایام ٹیکہ اندازی اور تنقیح نتائج میں بالضرور حاضر رہیں۔ گرد و نواح کے مواضعات کے بچوں کا جمع کرنا قطعاً ممنوع ہے۔

(۹) موضع کو روانگی کے وقت وہ اپنے ساتھ کافی مقدار میں لفٹ لے لیا کریں گے تاکہ تمام بچوں کو بلا تضرع وقت ٹیکہ لگاسکیں۔ ان کے پاس وقت واحد میں لفٹ کی اتل مقدار سو ڈوز ہونی چاہئے اور یہ مقدار جب ان کو ضرورت پیش آئیگی سربراہ کی ہدایا کریں گی۔

10. They will obtain from the village Police Patel a list of unvaccinated children in each village. The patels will be present when the vaccination operations are being performed and render all possible assistance to the Vaccinator in the due execution of their duties.

11. They will report by a letter to the District Health Officer if they have any complaint to make against the Patels of villages.

12. They will check the village vital statistics by house to house enquiry and compare the entries in the Patel's register. Mistakes and omissions found should be reported to the District Health Officer for each village.

13. A list of villages programmed for work by the Deputy Inspector of Vaccination or the District Health Officer, but not visited, will be submitted monthly to the Deputy Inspector of Vaccination and the District Health Officer showing

(۱۰) مواضعات کے ولس ٹیل ہر موضع کے تمام غیر ٹیکہ زدہ بچوں کی فہرست حاصل کر لیا کریں گے۔ ٹیل بروقت ٹیکہ اندازی حاضر رہیں گے اور چیفکبراران کو ان کے کار مفوضہ کی انجام دہی میں ممکنہ امداد دیں گے۔

(۱۱) اگر دیہی ٹیلوں کے متعلق ان کو کوئی شکایت ہوگی تو ہلت آفیسر ضلع کو بذریعہ مراسلہ اطلاع دیں گے۔

(۱۲) مواضعات میں حیات و ممات کے اعداد کی تحقیق خانہ نہ جانہ جا کر کریں گے۔ پٹیاؤں کے رجسٹروں کے اندراجات کا مقابلہ کریں گے اور مواضعات کے متعلق جو غلطیاں یا فروگزاستیں پائی جائیں گی ان کی رپورٹ ہلت آفیسر ضلع کو کر دیں گے۔

(۱۳) ان مواضعات کی ایک فہرست جن کا معائنہ نہ کیا جاسکا ہو حالانکہ ناظر چیفکبرار یا ہلت آفیسر کے مرتب کردہ پروگرام کارگزاری میں شامل تھے ہر ماہ آفسران مذکور کو ارسال کیا جائیگی جس

the dates fixed for such visits and the special causes of the omission.

14. They will make an immediate report the very day to the District Health Officer and the Deputy Inspector of Vaccination whenever small-pox or any other epidemic disease breaks out in the villages in which they work.

15. In cases of outbreaks of small-pox they will proceed forthwith to the village in which the disease is prevailing and will vaccinate all unprotected children and adults in the infected villages before leaving. If cholera is found in a village the vaccinator should immediately treat all the wells with Permanganate of Potash.

16. They will visit all the factories and schools in their circle and with the permission of the Headmaster and the factory owners endeavour to vaccinate, on the premises of the respective institutions without disturbance in their work or routine all unprotected children in the schools and

میں معینہ تاریخ نمائندہ اور وجہ فروگہ است
درج کئے جائیں گے۔

(۱۴) اگر چیچک یا کوئی دوسرا وبائی
مرض ان کے علاقہ کے کسی موضع میں تساع
ہو تو ان کو لازم ہوگا کہ اسی دن اس کی
ریورٹ ناظر-چیچکبرار اور ہلت آفیسر
ضلع کو بھیجیں۔

(۱۵) چیچک کے تساع ہونی کی صورت
میں فوراً متاثرہ تمام برہنج جائیں گے اور وہاں
سے واپسی کے قبل جملہ غیر ٹیکہ زدہ بچوں
اور بالغ لوگوں کے ٹیکہ لگائیں گے اگر کسی
تھبہ میں ہیضہ ہو تو چیچکبرار کو جانچنے کہ
پر منسکینٹ آف نوٹاش تمام باؤیوں میں
فوراً ڈال دے۔

(۱۶) اپنے علاقہ کے کل کارخانوں
(فیکٹریز) اور مدارس میں جا کر صدر مدرس
اور مالکان کارخانہ کی اجازت سے ادارہ
متعلقہ ہی میں غیر ٹیکہ زدہ بچوں کے
اس طرح ٹیکہ لگانے کی کوشش کریں گے کہ
وہاں کے کاروبار میں کسی طرح کا ہرج

factories. No compulsion should be used. The School-master and factory owners are personally responsible to obtain the permission of the parents or guardians.

17. They will maintain a sufficient supply of lymph for which they will send indents on the Superintendent, Vaccine D e p ô t, Hyderabad-Deccan, once a week or as often as may be necessary. If the lymph fails or deteriorates, the facts must be immediately reported to that Officer explaining the nature of the failure. The District Health Officer should also be informed.

18. They will avoid excessive stocks of lymph, keep lymph as far as possible in a cool place, shake vial well before using lymph, utilise lymph as quickly as possible, and vaccinate in the shade during the cool hours of the morning or evening, according to circumstances.

نویکن جبرہرگز نہ کرنا چاہیے۔۔ بچوں کے والدین یا سرپرستوں سے اجازت حاصل کر لینے کے ذمہ دار خود مدرسین مدارس اور مالکان کارخانجات ہیں۔

(۱۷) لفٹ کی کافی مقدار اپنے پاس موجود رکھیں گے اور اس غرض سے مہتمم ویاکسن ڈپو حیدر آباد کے ماس ہفتہ وار یا جب ضرورت ہو انڈسٹریسٹ بھیجا کریں گے اگر لفٹ ناکارہ یا خراب ہو تو اسکی رپورٹ معہ کیفیت ناکارگی فوراً عمدہ دار مذکور کو ارسال کرنی چاہیے اور ہلت آفیسر ضلع کو بھی اطلاع دینی چاہیے۔

(۱۸) اپنے پاس زیادہ تعداد میں لفٹ رکھنے سے احتراز کریں گے۔ لفٹ کو حتی الامکان سرو جگہ میں رکھیں گے اور قبل استعمال نشینی کو خوب ہلا کر جس قدر جلد ممکن ہو گا استعمال کریں گے اور بلحاظ حالات صبح اور تمام کے ٹھنڈے اوقات میں سایہ میں ٹیکہ اندازی کریں گے۔

19. They will instruct parents or guardians not to wipe off the lymph after vaccination and not to cover the Vesicles when formed with cow-dung, ash, leaf paste or similar objectionable applications and to explain to them the evils and dangers of such practices. n

20. They will examine every child carefully to ascertain that it is in a good state of health before proceeding to vaccinate it. Contra-indications to vaccination are:—

1. Skin disease.
2. Diarrhoea.
3. Fever.

21. Should the vaccinators find any child unfit for vaccination on account of illness of any other cause they will postpone the vaccination on such a child and enter the word "Postponed" in a special register maintained for the purpose. They will at the

(۱۹) وہی ماوالدین کو ہدایت کرینگے کہ بعد ٹیکہ اندہ ازری لٹف کو بونچ نہ ڈالیں اور بھالہ اٹھنے کے بعد اس پر گوبر-راکھ تہوں کا لیب یا ایسی ہی دوسری قابل اعتراض چیزیں نہ لگائیں اور ان کو اس عمل کے خطرات اور برائیوں سے متنبہ کریں گے۔

(۲۰) ٹیکہ لگانے سے پہلے ہر بچہ کا احتیاط کیساتھ امتحان کر کے اطمینان کر لیں گے کہ اُسکی صحت اچھی ہے ٹیکہ اندازی کیلئے موانعات حسب ذیل ہیں:—

(۱) امراض جلد۔

(۲) اسہال۔

(۳) بخار۔

(۲۱) اگر کوئی ایسا بچہ ملے جو علالت یا

کسی دوسری وجہ سے ٹیکہ اندازی کے قابل نہ ہو تو اُس کے ٹیکہ کو ملتوی کر دینگے اور اُس خاص رجسٹر میں جو اس غرض سے رکھا جاتا ہے لفظ ملتوی (Postponed) درج

same time issue a certificate to the effect that the child is then in a state unfit for vaccination. The certificate shall remain in force for the time specified therein not exceeding three months and be renewed if necessary.

22. They will go round the village after the vaccination is over with their peons and search for unprotected cases that may have escaped vaccination and compare the work done with the Patel's Birth Register.

23. They will systematically go round their circle, trace all unprotected children over 6 months of age and issue notices to the parents or guardians to get them vaccinated at once and to report to the District Health Officer all cases where the notices are not obeyed.

کر دیئے گئے اور ساتھ ہی ایک صداقت نامہ اس امر کے متعلق اجرا کر دیئے گئے کہ اُس وقت بچہ ٹیکہ نکالنے کے قابل نہ تھا۔ ایسا صداقت نامہ صرف اس مقررہ وقت تک کیلئے مفید ہو گا جسکی صراحت سیمین مندرج ہوگی جسکی مدت تین ماہ سے زائد نہ ہوگی لیکن اگر ضرورت ہوگی و صداقت نامہ کی تجدید بھی ہو سکیگی۔

(۲۲) ٹیکہ اندازی سے فارغ ہو کر وہ اپنے حیراسی کے کیساتھ قصبہ بس گنت لگا کر اُن بچوں کی تلاش کریں گے جو ٹیکہ اندازی سے بچ گئے ہیں اور ریشیل کے رجسٹرات سے تختہ کام کا مقابلہ کریں گے۔

(۲۳) وہ اپنے حلقہ میں سلسلہ وار دورہ کر کے چھ مہینے سے زیادہ عمر کے بچوں کی تلاش کریں گے اور اُن کے والدین یا ولی کو اطلاع نامہ اجرا کریں گے کہ بچہ کو فوراً ٹیکہ نکالوائیں جو لوگ اطلاع نامہ جات کی تعمیل نہ کریں گے اُنہی رپورٹ ہلت آفسر ضلع کو کر دیں گے۔

24. On inspection, should they find the vaccination successful they will give to the parent or guardian a certificate to that effect.

25. In the event of vaccination being unsuccessful, the child should be vaccinated again and subsequently inspected.

26. If they are of opinion that a child who has been three times unsuccessfully vaccinated is insusceptible of vaccination, they will issue to the parent or guardian of such a child a certificate to that effect.

27. In every village visited, the vaccinators are also expected to vaccinate and re-vaccinate a number of adults; 10 per cent. of his prescribed minimum may include revaccinations. Revaccination is not compulsory but is essential for protection against smallpox. Vaccinators will do all in

(۲۴) اگر معائنہ میں یہ ثابت ہو کہ ٹیکہ کامیاب رہا ہے تو بیچہ کے والدین یا دلی کو اسکے متعلق ایک صداقت نامہ دینگے۔

(۲۵) اگر ٹیکہ کامیاب نہیں رہا ہے تو بیچہ کو دوبارہ ٹیکہ لگا مایا ونگا اور پھر بیچہ کا معائنہ کیا جائیگا۔

(۲۶) اگر کسی ایسے بیچہ کے متعلق جس کو (۳) بار ٹیکہ لگایا گیا ہو لیکن کامیابی نہ ہوئی ہو ان کی رائے یہ ہو کہ وہ ٹیکہ کے اثرات قبول کرنے کی اہلیت نہیں رکھتا ہے تو وہ اُس کے والدین یا دلی کو اس مضمون کا صداقت نامہ اجرا کر دینگے۔

(۲۷) جیہ حکمرانوں سے توقع کیجاتی ہے کہ وہ جس موضع میں جائینگے وہاں کے بہت سے بالغ لوگوں کے بھی بار اول اور بار دیگر ٹیکہ لگائینگے۔ مگر ٹیکہ اندازی ان کی معینہ اقل ترین کارگہ اندازی کا (۱۰) فیصدی جزو ہو سکتی ہے۔ دوبارہ ٹیکہ اندازی لازمی تو نہیں ہے لیکن

their power to encourage re-vaccination and for this purpose they will give lectures and advise people by informal talks.

28. In revaccination cases, the vaccinators will see that scarification is not done on the sites of old scars.

29. They will not accept any fee or remuneration for any vaccination performed or for any certificate issued by them.

30. They can perform vaccination at the residence of a parent or guardian of a child, with the permission of the *District Health Officer or the Local Medical Officer as the case may be* and accept from the parent or guardian on a written receipt, a payment of Rs. 2 for every single case and

جینک سے محفظت کیلئے' بیکہ ضروری ہے۔ جینکبر آدو بارہ ٹیکہ اندازی کے متعلق مت افزائی کرنے میں کوئی دقیقہ اٹھانہ رکھیں گے۔ اور اس مقصد کو حاصل کرنے کے لئے لکچر بھی دیں گے اور لوگوں سے غیر سرکاری طور پر گفتگو کر کے اُن کو صلاح و ستورہ بھی دیا کریں گے۔

(۲۸) دو بارہ ٹیکہ اندازی کی صورت میں۔ جینک بر آراس امر کا لحاظ رکھیں گے کہ نہ یا ٹیکہ تہیم تسانات نہ لگایا جائے۔

(۲۹) ٹیکہ اندازی یا اجرائی صداقت نامہ کی باتہ کوئی معاوضہ یا فیس۔ جینکبر آران قبول نہ کریں گے۔

(۳۰) بلحاظ موقع ہلت آفیسر ضلع یا مقامی ہڈیکل آفیسر کی اجازت سے بیکہ کے والدین یا ولی کے مکان پر جا کر ٹیکہ اندازی کر سکتے ہیں۔ اور بیکہ کے والدین یا ولی کو رسید دیگران سے دو روپے فیس وصول کر سکتے ہیں اور اگر اُسی مکان میں دوسرے بچوں کی بھی ٹیکہ اندازی

four annas for every additional case in the same house. This procedure can be adopted only on the express desire of a parent or guardian of a child. No compulsion should be made by the Vaccinators. All monies received under this head should be credited in the Government Treasury through the District Health Officer.

31. If vaccinators received any unauthorized remuneration for vaccinating a child or for granting an unauthorized certificate, they will be liable, on conviction before a Magistrate, to a fine which may extend to Rs. 20. After conviction before a Magistrate they will be dismissed from the service.

32. The following registers will be maintained by Vaccinators:—

1. Daily Diary of work done.
2. Daily Nominal Register of Vaccinations.

کیگئی ہے تو حار آنہ فی س مرتبہ فیس سے
سکتے ہیں۔ عمل صرف اسی صورت میں
جائز ہوگا کہ سچے والدین یا ولی خود خواست
ظاہر کریں۔ جیچک برآران کسی کے ساتھ
زبردستی یا جبر نہ کریں گے۔ اس طرح جو
رقوم وصول ہونگی۔ وہ توسط ہلت آفیسر
ضلع خزانہ سرکاریں جمع کرادی جائینگی۔

(۳۱) اگر جیچک برآران کسی بچہ کو
ٹیکہ لگانے کے صلہ میں ممنوعہ معاوضہ یا
صدقات نامہ کی اجرائی کی فیس جس کے وہ
مجاز نہیں ہیں وصول کریں گے تو وہ
محسٹریٹ کی عدالت سے (۲۰) روپے
تک سزائے جرمانہ یا نئے کے مستوجب
ہوں گے اور عدالت سے سزایابی کے بعد
وہ خدمت سے برطرف کر دئے جائیں گے۔
(۳۲) جیچک برآران حسب
ذیل رجسٹرات رکھینگے:—

(۱) روزنامہ کارگزاروں

(۲) روزانہ ٹیکہ اندازی کا

اسموباری رجسٹر۔

3. Inward and Outward Registers.
4. Delivery Book (Despatch).
5. Service Tickets Register.
6. Lymph Register.
7. Register of unprotected children.
8. Register of Files.
9. Pay Register.
10. Contingencies Register.
11. Book of Cash Receipts with counterfoils.
12. Book of sick certificates with counterfoils.
13. Book of Vaccination Certificates with counterfoils.

33. They will prepare correctly and submit punctually the monthly and annual reports and returns prescribed for them by the District Health Officer.

If any delay occurs in the submission of such reports and returns, they will be fined

- (۳) رجسٹر موصولہ و مجاریہ -
- (۴) ڈیہ بی -
- (۵) رجسٹر سروس ٹکٹ -
- (۶) رجسٹر لفٹ -
- (۷) غیمہ ٹیکہ زدہ بچوں کا رجسٹر -
- (۸) رجسٹر اسٹند -
- (۹) رجسٹر تنخواہ -
- (۱۰) رجسٹر صادر -
- (۱۱) رجسٹر محصلہ ، رقم معہ کانٹرفائل - (Cash)
- (۱۲) رجسٹر صداقت نامجات بیماری معہ کانٹرفائل - (Counterfoil)
- (۱۳) رجسٹر صداقت نامجات ٹیکہ اندازی معہ کانٹرفائل -
- (Counterfoil)
- (۳۳) جیجکبر آران سالانہ اور ماہانہ رپورٹیں اور ہلت آفیسر ضلع کے مجوزہ تختہ جات صحیح صحیح تیار کر کے وقت پر ارسال کیا کریں گے اگر ان رپورٹ اور تختہ جات کی روانگی میں تاخیر ہوگی تو ہلت آفیسر ضلع

annas eight for each day's delay, by the District Health Officer.

34. The Health Department will have no further use for subordinates who falsify any statistical returns or reports, etc.

35. They will intimate the District Health Officer forthwith when a child who has reached the age of compulsory vaccination has been removed from a village or locality before being vaccinated. The full address and place to which the child has been removed should be clearly stated.

36. They will not correspond with any official save the District Health Officer on any matters. The exception to this is in the case of procuring lymph direct from the Vaccine Depot.

37. They will pass an examination in "Minor Sanitation" conducted by the Hyderabad Central Ambulance

ن بردت تاخیر کے لئے آٹھ آنے۔ و مہ
رمانہ کریں گے۔

(۳۴) محکمہ صحت عامہ کو اس بات
کوئی ضرورت نہ رہے گی جو کسی رورٹ یا
فٹہ اعداد شمار میں فرضی یا جعلی اندراجات
کریں گے۔

(۳۵) جب کوئی بچہ جس کی عمر حریہ
سیکھ اندازی کے قابل ہو گئی ہو کسی قصبہ
بمقام سے، بغیر ٹیکہ یا بی کے منتقل کر دیا
جائے گا تو اس کی اطلاع فوراً ہلت آفیسر ضلع
کو دینگے اور اس کے ساتھ اُس مقام کا
ٹیکہ اور مفصل تہ بھی بھیج دیں گے جہاں
بچہ منتقل کر دیا ہے۔

(۳۶) بجز ہلت آفیسر ضلع کے کسی
عہدہ دار سے وہ کسی معاملہ میں مراسلت
نہ کریں گے لیکن حصول لفٹ کے بارے میں
ویا کسین ڈپو سے راستہ مراسلت کرنا اس
کلیہ سے مستثنیٰ ہو گا۔

(۳۷) اُن کو ماہر سینی ٹیشن (معمولی
تدابیر حفظان صحت) کے متعلق حیدرآباد

Board so that they may obtain a certificate of proficiency. They will be trained by the District Health Officer at Headquarters during the rainy weather. Want of this certificate may militate against promotion.

38. When vaccinators are unable to do their work on account of illness, they must furnish a medical certificate from the nearest Taluq Medical Officer. They will be liable to forfeiture of salary for the days on which they fail to work and will also be liable for the cost of any lymph that may be wasted by them.

39. They will use every effort to popularise the practice of vaccination in their jurisdiction. They must endeavour to secure the confidence and co-operation of the people amongst whom they work.

سنٹرل امبولنس بورڈ کا امتحان
(Hyderabad Central Ambulance Board) پاس کرنا
چاہئے تاکہ صد اقدنامہ ایاقاقت حاصل ہو جائے۔
ہلت آنیسر ضلع اُن کو موسم بارتس میں
مستقر ضلع پر تعلیم دیا کرینگے۔ صد اقد نامہ
مذکور کی عدم موجودگی۔ جیجکبر آردوں کی ترقی
میں حائل ہوگی۔

(۳۸) اگر علالت کے باعث۔ جیجکبر آران
اینا کار منصبی انجام دینے کے قابل
نہ ہوں تو اُن کو یاہئے کہ قریب ترین تعلقہ
کے میڈیکل آنیسر کا طبی صد اقد نامہ پیش
کر دیں۔ جن ایام میں وہ کام نہ کرینگے
اُن کی ٹخوہ قابل ضبطی ہو جائیگی اور جسقدر
بعت جو اُن کی وجہ سے ضائع ہوگی اُس کی
قیمت ادا کرنے کے مستوجب ہیں۔

(۳۹) عمل ٹیکہ اندازی کو اپنے
حلقہ میں ہر دلعزیز بنانے کی تبلیغ کوشش
کریں گے اور جن لوگوں میں وہ کام کرتے
ہیں اُن میں اپنا اعماد برٹھائینگے اور اُن کو
اپنا شریک کار بنائینگے۔

40. They will operate on all classes alike, without any distinction of caste or creed. They will treat every one with consideration and use kind and conciliatory words both to the children and villagers.

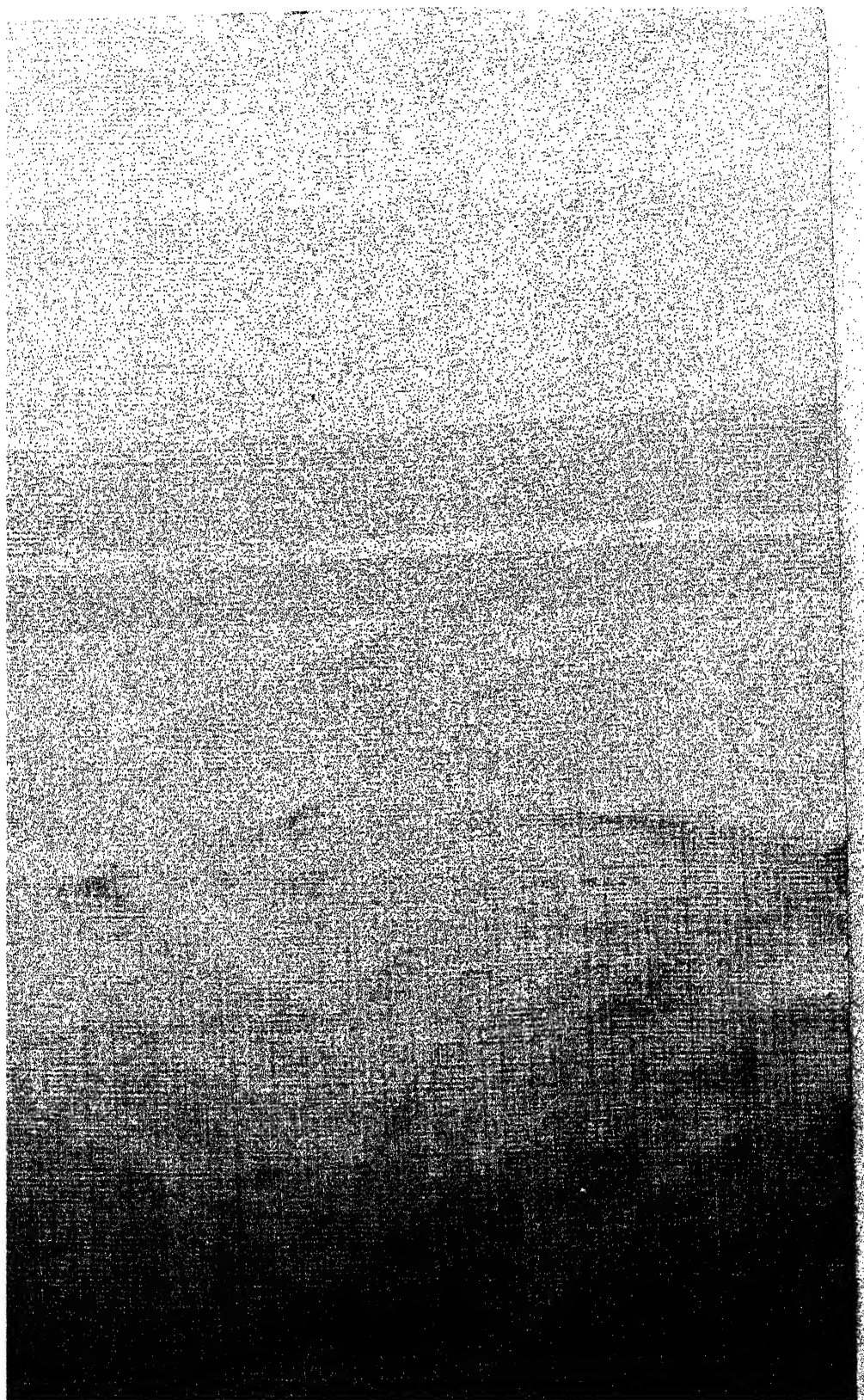
41. Vaccination at the District Headquarters will be conducted under the control of the District Health Officer and under the immediate supervision of the Deputy Inspector of Vaccination; similarly it will be done under the supervision and control of the Taluq Medical Officer, at Taluq Headquarters. He will get his registers checked by the Taluq Medical Officer monthly and also children vaccinated at headquarters of the Taluq.

42. They will bring any sanitary defect observed to the notice of the District Health Officer forthwith.

(۴۰) بلا امتیاز قومیت و مذہب وہ ہر ایک کے ٹیکہ لگائیں گے اور ہر ایک کے ساتھ معقول برتاؤ کریں گے اور نرم و پر حق انداز میں بچوں اور دیہاتی لوگوں سے گفتگو کریں گے۔

(۴۱) مستقر ضلع میں ٹیکہ اندازی بہت آفیسر ضلع کے زیر اہتمام ناظر، چیف کبر آران کی راست نگرانی میں انجام دیا جائیگی اور تعلقات میں زیر اہتمام نگرانی مدیکل آفیسر تعینہ ہوگی۔ چیف کبر آران کو چاہیے کہ رجسٹرات کی ماہانہ تنقیح تعینہ کے مدیکل آفیسر سے کرایا کریں اور بن بچوں کی ٹیکہ اندازی تعینہ ہوئی ہے اس کی بھی تنقیح کرایا کریں۔

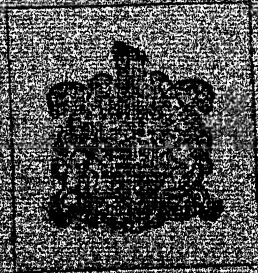
(۴۲) معاملات خفیانہ صحت میں ان کو جو نقائص نظر آئیں گے ان سے فوراً بہت آفیسر ضلع کو مطلع کریں گے فقط



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PREFACE.

THE Administration Report normally deals with the year's working only, but every ten years the Report covers a much larger ground, historical and descriptive matter being included which will only need revision every ten years. Such a revision was made last year, and it is to the "Land of the Five Rivers" * that reference should be made for all historical and descriptive matter, which is not specially concerned with this year's working. The traditional 'year under report' varies. The Administration Report is based on the reports of the various departments. These reports deal with varying periods, extending from Land Revenue, which deals with the year ending on the 30th September, 1922, to Co-operation which deals with the year ending on the 31st July, 1923, practically a year later. The exact period for each subject can be found by referring to Appendix I, where a list is given of the various Reports on which this Report is based. Generally, however, it may be said that Chapters I and V relate to the Calendar year 1922, Chapter III to the agricultural year ending September 30th, 1922, and the remaining Chapters mainly to the financial year ending March 31st, 1923. A brief general subject index is appended. An abstract of the most important subjects dealt with is given in the General Summary.

* Constituting Volume I of the Punjab Administration Report for 1921-22 and containing the decennial portion of the Report.

2 In the , for example, the subjects have been reserved and financial subjects have been reserved, some between the beneficent departments of Government which are under the control of the Governor and the Ministers, and those which are either revenue-producing or deal with the administrative machinery of Government which are under the Governor in Council. The Standing Committees of the Legislative Council form a valuable channel for the interchange of ideas between the Executive and the Legislature. While maintaining a strict scrutiny in to all budget proposals for expenditure and a reluctance

to impose any tax on the Legislative Council has not been a significant occasion arose. The most important of the financial liabilities so assumed by the Council amounted to Rs. 42 lakhs in connection with the riots at Amritsar in 1919. On the whole the Council represented the moderate current of political opinion, and was by no means an extremist body. The Muhammadans constituted the largest party in the Council, but represented rural interests and therefore sometimes identified themselves with the rural members of other communities.

Land Administration.

3. The season of 1921-22 was on the whole favourable except in the east of the Province. This fact combined with the price and the area of large areas of land revenue comprising 57 per cent. The total amount of fixed and floating land revenue to be collected was Rs. 417 lakhs, of which 107 lakhs was actually recovered. In recent assessments one of the members of the Legislative Council the land revenue assessed has in no case exceeded one-third of the net assets of each assessment circle. Steps are being taken to amalgamate the staffs of Revenue and Canal patwaris in the British Territory irrigated by the Western Jammu Canal. From the results of this amalgamation it will be possible to decide whether its extension to other canals is feasible. In view of the increased responsibility of patwaris attempts are being made to raise their educational standard. The condition of the agricultural population was generally good, and economically the condition of agricultural labourers is improving owing to the high wages offered in the Colony areas.

Local Self-Government.

4. Even before the introduction of the Reforms Scheme the Punjab Government had taken steps towards a substantial reform in Local Self-Government. With the introduction of the Reforms, the department of Local Self-Government became a transferred department under the control of the

Minister for Education. The Government have been exercising powers and independence of action in the Education Department. By the Village Panchayat Bill, the Government have hoped to establish a system of village communal self-government. The Bill provides for the nomination of members to the village Panchayats and to the District Boards. Talukdars are to be nominated to the District Boards; and Municipalities have been empowered to elect non-official Presidents and Vice-Presidents. The District Board franchise has been extended to all talukas throughout all over the Province. The Government have improved the District Boards and Municipalities, and some of the improved, though partly by cutting down grants for local services. In District Boards expenditure on education, on community work, and Medical Relief have a had to be reduced, and the condition of Municipal roads has leaves a great deal to be desired.

Public Health.

5. The year 1922 was an exceptionally healthy one in the Punjab. Though plague has been considered, cholera only occurred in a very mild form. Relapsing fever appeared in several districts, and though not responsible for many deaths, gave rise to considerable apprehension. The local stringency prevented any method extension of curative medical work during the year 1922. By means of Itinerating Dispensaries, it was, however, hoped to afford a more widespread relief at a cheaper cost in rural areas.

Education.

6. The year 1922-23 has been in the main a time of harvest for the Education Department. The seed that was sown some years ago by the formulation of the 5 years' programme for the expansion and improvement of vernacular education has now grown to ripening. The main efforts of educational workers have therefore been devoted to the reaping of the harvest and to ensuring that the abundant crop shall not run to waste under the influence

of financial stringency. One result of the Reforms and of the consequent financial stringency has been the devotion of greater attention to the important problem of educational finance, and consequently educational progress has been far greater than the increase in expenditure from Rs. 190 to Rs. 220 lakhs would indicate. Special attention has been devoted to the education of the rural classes. Apart from the provision of agricultural training properly so-called the endeavour has been made to provide a course more on agricultural and less on literary lines. The problem of village education is also being approached from another side by the provision of schools for adults. The rapid rise in the number of Muhammadan scholars is a satisfactory indication of the spread of primary education among the rural and poorer urban classes.

Finance.

7. The financial changes made under the Reforms Scheme have necessitated a revision of budget procedure. The most important new departure is the definite separation of capital receipts and expenditure from revenue receipts and expenditure. Capital expenditure, so far from being a drain on the resources of the Province, is directly remunerative. Irrigation capital expenditure, for example, after paying all interest and other charges, affords a large net profit to the revenues of the Province. But the deficits on revenue account are in quite another category. The total deficit in these two Reform years amounts to Rs. 292 lakhs, and a further deficit of Rs. 63 lakhs has been budgetted for in 1923-24, making a total of Rs. 355 lakhs, so that the last three years have saddled the Province with an interest charge of Rs. 7 lakhs and a sinking fund of Rs. 25 lakhs, or a total Debt Service of Rs. 32 lakhs, for which the Province has nothing to shew at all. The present financial deficit, though it has been intensified by certain large items of expenditure passed by the Council, and by the Council's refusal to agree to new taxation, has its main origin in items of

expenditure and financial arrangements determined on before the introduction of the Reforms, including the large increase necessitated in the pay of establishments by the rise in prices. This has swallowed up the anticipated increase in revenue, an increase which was not actually realised. The actual increase of expenditure due to the introduction of the Reforms themselves only amounted to about Rs. 5½ lakhs annually. The net revenue from Excise which was Rs. 145 lakhs in 1920-21, and fell to Rs. 112 lakhs in 1921-22, has again fallen to Rs. 102 lakhs in 1922-23. This fall is due to the decreased licit consumption for country spirit following on the temperance policy of Government, in consequence of which though the rate of duty has been increased the receipts under this head have again fallen by Rs. 12 to 47 lakhs. By the financial arrangements made under the Reforms Scheme Income-tax receipts, half of which were previously credited to the Province, are now credited to the Imperial Government. The new Income-tax Department came into being on the 1st September 1921. With a population of just under 21 millions in the British Territory of the Punjab there are 24,683 assesses, of whom 3,011 are salary cases. Taking the demand of 70 lakhs, which is approximately what it is likely to be after all the appeals have been heard, we get an average tax of Rs. 284 per assessee.

Agriculture.

8. Agriculture will always remain the most important industry of the Punjab. Its climate, its great alluvial plains, its fertilising rivers and its communications with the ports of Karachi and Bombay render it specially fitted for the production of wheat and cotton, and these are commodities for which, as the world progresses, the demand must be constant and increasing. The season of 1922-23 was a very favourable one characterised by a good monsoon and plentiful winter rain. The wheat crop was the most important, being worth about Rs. 34 crores. The gram crop came next (the year being a very favourable one, for this crop)

and was worth Rs. 11½ crores. The next important crops were cotton and sugarcane worth about Rs. 7 crores each. Punjab-American cotton has been more used in Europe during the last two years than formerly owing to the shortage of the American crop. This is no small gain in helping to stabilise the cultivation of cottons of better staple, but the whole future of the crop is threatened by malpractices which are growing rapidly and will increase if not promptly dealt with. The object of the Co-operative Department is to examine the whole economic structure of the Province, to study the defects which retard economic progress, and to discover the factors which contribute to the comparatively low standard of prosperity. The mere reduction of indebtedness and the provision of cheap credit are not its objects, but its aim is the provision of sound, well controlled credit for productive purposes and the replacement of unproductive debt by productive borrowing. The last three years have been marked by many discouraging features; the financial condition of the Province has served to prevent the allotment of funds sufficient to maintain an adequate staff. Consequently except in a few outlying districts attention was devoted rather to the improvement and consolidation of existing societies than to the starting of new ones. The Lyallpur Co-operative Commission Sale Shops are attempting to solve the problem of marketing, while by the Consolidation of Holdings the evil of fragmentation is being removed from the Central Punjab. Valuable information as to the conditions of Punjab cattle was obtained from the cattle census held in February 1923. The quantity of cattle in the Punjab seems adequate, though not the quality. The tendency to keep cow buffaloes for milk and to purchase plough cattle from the Haryana or Dhanni tracts is increasing, and throwing an increasing strain on the good stocks of those areas. The question is one of increasing the available stock of fodder, which is diminishing with the extension of cultivation, and preaching the

cult of the pedigree bull, selected for its containing milk-producing and plough qualities. The buffalo problem is not so acute, as the people themselves seem to take more pains about buffalo selection and breeding. Some transport organization seems necessary to improve the urban milk supply. The whole cattle question deserves the careful attention and investigation which it is receiving from the Veterinary Department.

Production and Distribution.

9. The Forest Department continues to experience the difficulty which would be felt by any business organization which is handicapped financially by having to meet capital expenditure out of revenue. The financial year has proved the leanest on record. The trading account shews a gross profit of Rs. 1.94 lakhs. Deducting from this Rs. 1.64 lakhs, interest at 6 per cent. on capital expenditure for the last ten years (Rs. 34.32 lakhs) and Rs. 2.03 lakhs depreciation of timber and plant, there remains a net loss of Rs. 1.73 lakhs. The immediate cause of this deficit was due to the fall in value of timber. The relations of the department with the public are improving. With the association of local people in forest industries, such as lumbering and resin tapping, much has been done to avert antagonism. The financial position of the Punjab during the year 1922-23 precluded the initiation of new schemes of Industrial Development. Considerable progress was, however, made with schemes which had already been undertaken, and the activities of the Department of Industries as an agency for the encouragement of industries generally, and for the improvement of Industrial Education, were not curtailed, the expenditure on the Department rising from Rs. 5½ lakhs in 1921-22 to Rs. 8 lakhs in 1922-23. Progress in the extension of public electric supply in the Punjab will inevitably be delayed till the scheme for obtaining hydro-electric power from the Himalayas is completed. Oil springs have been known for many years to exist in the Rawalpindi and other districts

in the Punjab, but the output was insignificant until the discovery of the Khetri field, which still remains the only one worked, though numerous companies are continuing their activities in sinking wells in the neighbourhood. But the completion of the new road from Fatehjang to the oil-field at Khetri and the laying of a pipe line from Khetri to Rawalpindi have enabled Attock oil to be put on the market at a reasonable price. Owing to this opening up of the oil district the output of oil rose to 7½ million gallons in 1922. In 1922-23 the gross revenue receipts from Irrigation amounted to Rs. 531 lakhs as against an average of Rs. 4.75 lakhs in the previous triennium. This includes Rs. 1.71 lakhs indirect receipts. Work is proceeding on the Sutlej Valley Project, and the survey of the land to be irrigated under the Thal Canal Project has been completed. The increase in gross earnings on the North-Western Railway from Rs. 13.02 lakhs to Rs. 11.17 lakhs is almost entirely due to the receipts from goods traffic, which is partially owing to the larger exports of wheat, consequent on the removal of the embargo on the export of wheat.

CHAPTER I.

PROFITATION

(The above table is
 prepared by the
 Ministry of Home Affairs
 and is based on the
 returns received from the
 District Magistrates.)

TABLE I. — Crime, 1919-22.

1. Crime which had decreased during the War was increasing from 1919 onwards, but showed a tendency to decline towards the end of the year under report, which has been maintained since. The prevalence of crime was partly due to demobilization, but the causes were also partly economic and partly political, and with the improvement in the economic and the political situation security also has of late improved. Even since the conclusion of peace however, crime has never reached the high figures prevailing in the year immediately preceding the War. While however crime generally speaking, has, after increasing since the peace, begun again to decrease, the more serious forms of crime have, as noted below, maintained their tendency to increase.

2. At the commencement of the year 1922 political agitation and the spirit of defiance engendered by the non-co-operation movement were still gaining ground. The Seditious Meetings Act was repeatedly defied in Lahore and Amritsar, and Volunteer organizations continued to make demonstrations long after they had been declared illegal associations. In several districts parties of Volunteers, who attempted to interrupt the auctions of liquor contracts, had to be dispersed by force. In January, on the arrest of a political agitator at Jhajjar in the Rohtak district, his supporters took possession of the Town Hall, hoisted national flags and removed the octroi posts. Order was not restored until the mobs had been forcibly dispersed by a party of Additional Police and the leaders had been arrested. A detachment of British troops had to be posted to Rohtak until the return of normal conditions. The Congress and Khilafat* movements waned later in the year, and before its close ceased to attract public attention. Communism, inspired by Bol-

* See 1921-22 Report, II, 1.

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*See 1921-22 Report I, 654 foll., II, 2, 3.

At this stage of the war was said to have been very high, and nothing less than a total annihilation in such cases false rumors quickly spread, and the result was a great loss of property after a certain amount of damage had been done. In the day of the M. H. movement was increased by the murder of a handful of Mohomedans in the Hindu quarter. Two Mohomedans and four Hindus were killed during the riots, and both sides aimed at damaging the other rather than looting.

5. Apart from these, and partly from economic causes and partly as a consequence of the relaxation of authority caused by political disorder, serious forms of crime have been on the increase. Robberies and burglaries were conspicuous in the central districts where the Akali movement prevailed. In the riverain tracts cattle theft was rife, but as usual comparatively few cases were reported, as owners of missing cattle generally prefer to negotiate with the thieves for the return of the stolen property rather than to seek the aid of the Police and thus scare the thieves into disposing of valuable animals, altogether. Traffic in women is assum-

ing serious proportions in the eastern and central Punjab. Few cases are however reported. It is usually only when the women have proved unfaithful or some fraud has been practised by the seller that Police assistance is sought. The traffic arises out of a shortage of marriageable women and is very lucrative. While many of the women brought for sale, particularly those of inferior caste, readily acquiesce in the arrangement, others are undoubtedly seduced and abducted, and finally sold when too demoralised to care what happens to them. The legislation embodied in the Indian Penal Code Amendment Act, 1923, has come none too soon.

6. On the Western Frontier disorder was mainly due to outside activities. A large proportion of the dacoities committed in the Attock and Mianwali districts were the work of Frontier raiders accompanied by outlaws. Two well-known outlaws brought a gang across the Indus to a village in the Mianwali district, where they took property valued at over Rs. 12,000 and kidnapped one man, two women and two children. The women and children were rescued by a pursuit party in the Bannu district of the Frontier Province, and the man was wounded and abandoned because he was unable to keep up with the gang. One of these outlaws has since been arrested. The campaign against outlaws which is being conducted in the North-Western Frontier should do much towards preventing further raiding in the Punjab. On the Southern Frontier crime is due rather to family differences than to the forces of disorder. In the Dera Ghazi Khan district, where 22 murders were committed during the year, Baluch custom still demands the murder of an unfaithful wife and her lover. Murder is, therefore, likely to remain a common feature among the Baluch tribes for some time to come.

7. The prevalent unrest and high prices are reflected in the increased number of serious offences against property. The following table indicates sufficiently the state of affairs :—

Head of crime.			1918.	1919.	1920.	1921.	1922.
Dacoity	...	...	84	169	111	187	435
Robbery	...	...	213	332	371	578	564
Theft	...	...	7,726	8,916	8,357	9,585	9,403
Receiving stolen property	...	...	1,541	1,935	1,924	2,096	2,050

The outstanding causes of this state of affairs have been indicated above. The reluctance of magistrates to convict is also quoted as a contributing factor. The reasons for this are various. The defence is usually more ably conducted than the prosecution, which in many cases is not represented at all. Nor is there the co-operation between the Bar and Bench which obtains in England and prevents perjury therefrom becoming the scandal that disfigures Courts in India. Even good cases are often spoiled by the introduction of bad evidence or the attempt to implicate innocent persons as well as those who are really guilty. Magistrates also fail to make adequate use of section 203, Criminal Penal Code, which enables them to dismiss a case at the outset. Consequently a disproportionate amount of their time is taken up in trying cases which should have never been brought into a Court.

3. Moreover, the antagonism which undoubtedly exists between the public and the Police prevents the proper investigation of crime at the start. The antagonism is not lessened by the large number of cases brought by the Police under section 107, Criminal Procedure Code, involving this year nearly 40,000 persons. The increase in serious crime has also coincided with the reduction of supervision by gazetted Police officers, and has varied inversely with that supervision. This reduction has now almost reached a final stage when there is nothing left to reduce, and, whereas 20 years ago a Superintendent or Assistant Superintendent of Police proceeded himself to the scene of a murder or a serious dacoity and personally supervised the investigation, the work is now left entirely in the hands of the subordinate staff. Police work is now more complex and more difficult, and Superintendents are very fully occupied with matters of routine and heavy correspondence, and are also expected to report frequently on the political situation. At the same time it is beyond question that the primary duty of a Police force is the detection and prevention of crime, and that a case, which is destined to cost a very large sum of money, to involve very serious consequences, and to occupy the time of several highly paid members of the judicial service and Government counsel, demands more than an initial impulse from Superintendents of Police. The High Court suggest that the superior staff should be doubled, and in every dis-

trict in addition to the Superintendent in general charge there should also be a Superintendent who would devote his time to the investigation and sending up of cases.

9 The Jirga system under the Frontier Crimes Regulations continues in force in the districts of Dera Ghazi Khan and Mianwali and in the Leiah tahsil of the Muzaffargarh district. These areas all adjoin the Frontier, and the primitive conditions there obtaining render it difficult to maintain order by the usual judicial processes. The system has been most successful in the Dera Ghazi Khan district where the machinery was already in existence before the advent of British rule owing to the tribal constitution of the Balochi nation. Its extension has been advocated to the portion of the Shahpur district which lies within the Salt Range, but the absence of such a tribal machinery among the Awan and other Salt Range tribes would probably render the introduction of the system impracticable there. In the districts in which the Frontier Crimes Regulations is in force the Deputy Commissioners on the finding of a Council of Elders may pass sentence up to fourteen years. The percentage of convictions by the Council of Elders is only 46 as against a percentage of 57 in cases where the Police prosecute in ordinary criminal courts. These figures constitute an effective reply to the popular criticism of the Frontier Crimes Regulations as being a means of enabling district officers to secure convictions whenever they like and at any cost.

10. The detection of poisoning cases mainly rests with the Chemical Examiner to Government, Punjab.† Articles are now only forwarded to the Imperial Serologist at Calcutta in cases in which it is considered necessary to determine the source of the blood. The Chemical Examiner has received much valuable help from the admirable history of the case and description of the symptoms given by forwarding medical and Police officers. This enabled an immediate successful search to be made for the poison indicated, saving much time, labour, and material that would otherwise have been expended in searching for other possible poisons. In the human poisoning cases opium and arsenic continue to

* See 1921-22 Report I, 101-142.

† See 1921-22 Report, I, 196

be most commonly used. The use of opium is a dangerous delinquent narcotic which tends to facilitate robbery by stupefying the victim. In these cases there is probably no intention of self-harm, but the result often results from an overdose. Death is also due to an intoxicant, either by itself, or added to another drug. The *Datura* is a well-known intoxicant which is often used and consequently it is dangerous to use it in the case of a relative or other persons.

11 The general condition of the prisons in the Province of Punjab in 1922 was such that there would be in any case a considerable increase in the jail population; but apart from this 5 000 arrests were made in connection with the Ghadr Bagh affair (p. 4. 3). The total population of the Province in 1922 was 25 000, of which 3 000 were in the jails. In view of the past five years, probably constituting a record for the Province. This was in spite of the fact that the Local Government had endeavored to relieve overcrowding by releasing under proper safeguards well behaved prisoners who had served two-thirds of their sentences. Overcrowding has been serious for some years but financial considerations have prevented the construction of a new Central Jail and of additional Borstal Institutions which are badly needed. The exceptionally large jail population was accommodated by the improvisation of temporary jails at Montgomery, Amritsar and in the Attock Fort and by erecting camps within the walls of existing jails where the actual ground space is ample. By the construction of barbed wire barriers it was possible to confine prisoners in tents without using the belchain, and overcrowding was entirely avoided.

12 In spite of these difficulties the recommendations of the Indian Jails Committee were carried out so far as financial conditions would allow. Improvements were made in food and clothing; a beginning was made with the provision of religious teaching; the use of the belchain was abolished; jail punishments were revised; the remission system was made more liberal; and concessions were made with regard to interviews and letters. But these alleviations did not produce any increased respect for authority. The standard of dis-

discipline in jails again deteriorated. Serious outbreaks occurred in the Ludhiana and Montgomery jails and minor outbreaks wherever Akali prisoners were confined. The Akalis were treated throughout with special consideration. Extra blankets and clothes were given to them, and their defiance of all Jail rules was borne with exemplary patience. The reluctance on the part of the authorities to inflict the punishment of whipping emboldened these prisoners to such an extent that in some places it necessitated the use of arms in order to suppress the state of mutiny which prevailed. Their example had a demoralizing effect on the other prisoners. Throughout the year 1922 the press gave space to constant complaints of a flagrantly false and malicious nature with regard to the treatment of these prisoners in Jail. All the more serious complaints were enquired into, and they were invariably found to be baseless.

13. The large influx of prisoners made it impossible to organize their employment on the most efficient lines, and the Akali prisoners contumaciously refused to perform the task allotted to them. The blankets and clothes provided for them had to be procured at very short notice and at extremely high prices. This increase in expenditure and diminution in income resulted in a net increase of expenditure amounting to Rs. 7 lakhs. The Province had to pay heavily, both in Police and Jail charges, for the lawlessness inculcated by the non-co-operation and Akali movements whose lessons were readily learned by the ordinary criminal classes. The importance of keeping child offenders from entering jails was sufficiently recognized, but the provision of the necessary institution for the purpose had to be postponed owing to the financial stringency.

14. The new system of dealing with criminal tribes inaugurated in 1917* is beginning to have effect. In 1916, before the inauguration, the number of registered members of criminal tribes was 12,500. The number in 1922 was about the same. Yet the number of convictions under the Indian Penal Code of such members has diminished from 974 to 154. As will be seen from the statement below it

Criminal Tribes :
satisfactory working
of the new scheme.

*See 1921-22 Report, I, 91, 92.

has been possible to greatly diminish the number of those on the register :—

Year.			MAGISTRATES' OFFICES (1901-1922)		
			Settled	Wandering	Total
1917	.	...	23	11	34
1918	...	...	21	10	31
1919	...	..	20	7	27
1920	...	...	19	4	23
1921	..	...	12	4	16
1922	..	.	9	3	12

When the system was inaugurated care was taken to include all members of wandering tribes. As will be seen from the above statement nearly two-thirds of these have been released. The process of eliminating the comparatively harmless element of the criminal tribes is being steadily continued, and 4,419 members were exempted in 1922.

15. Experience has demonstrated that the criminal habits of the tribes were mainly due to economic causes. Prior to 1917 these wandering tribes lived a nomadic life plucking a precarious livelihood by begging or stealing. They were shunned by society and were left with no other possibility of livelihood except theft. With the inauguration of the scheme they were restricted to definite areas and offered the alternative between a village life, which left them a certain amount of liberty and settlement life, which entailed entire loss of it. Agricultural settlements have been founded for the better behaved tribesmen. Land hunger is now as strong with these people as with other classes and the prospect of a grant of land is a great incentive to good behaviour, while the living it provides helps to remove the temptation to crime. Industrial settlements have been less successful, open air life being more suited to the temperament of these nomads. It is therefore unfortunate that Budget considerations have hampered the extension of the four forest settlements. The Reformatory Settlement at Amritsar

which is intended for the worst behaved of the criminal tribesmen has expanded till, at the end of 1922, the population reached 1,015. Even then, except in the case of the most desperate characters, a large amount of liberty is allowed, and most of the inmates work for private employers in the city.

16 While the settlements are proving efficacious as a means of reformation, the best hope for the permanent redemption of these degraded classes lies in the education of their children. The number of children attending schools in the settlements and in villages is well over 3,000. In the settlements girls are taught the elements of domestic economy. The Canadian Anglican Mission at Palampur has started a weaving school for boys, and there is a Railway Settlement at Moghalpura where good wages can be earned and the inmates have the chance of learning skilled trades. The children are usually above the average in intelligence and show extraordinary keenness to learn. This is a fact which seems to indicate that their criminal propensities are due not so much to original sin on their part as to a social system which left them no opportunity of leading a useful life.

17. The annual number of civil suits instituted in all courts seldom varies by more than 5 per cent. from a normal of 190,000. In the influenza year of 1918 the number fell as low as 174,408 and in 1921 non-co-operation and agricultural scarcity combined reduced the number to 177,000. This year the number instituted is 187,000, which is a normal amount. The pending file continues to rise, and has this year nearly reached 60,000. The average duration of a contested suit has risen to 130 days. The rise is due partly to the disposal of old cases pending on account of the War. The pending file of appellate work in the High Court has increased, but the outturn of work in 1922 was considerably greater than that of 1921. If the practice observed in Madras, by which District Munsifs of 7 years' standing dictate judgments in open Court to shorthand writers, were extended to the Punjab it would help considerably in reducing the average duration of suits. Delays are also partly attributed to the unsatisfactory nature of the process-serving establishment. Efforts have been made to improve it, and the supply of bicycles to process-servers in the Lahore



district has secured an increase of 72 per cent. in the number of processes served.

18. The impossibility of getting decrees executed within a reasonable time constitutes a serious blot on the present system of administration of civil justice. Litigants make every endeavour to delay and hamper execution, and the agency of process servers, *malnazirs* and *madud naib-nazirs* is unsatisfactory. It has been suggested that the whole execution work of the district should be placed in the hands of a single Court, limiting the powers of a Sub-Judge of the 1st class. Enquiries are being made into the possibility of this scheme, and if found practicable it will be tried experimentally in one district. Execution work is also hampered by the circumstantial attendance at Court of some presiding officers. The Sub-Judges do not offend in this respect to the same extent as Magistrates, but in many civil courts business is not commenced precisely at 10 o'clock. The result is often that execution work is not taken up until late in the evening after Court hours, when members of the Bar, clerks and even litigants themselves are anxious to get away, and the cases are dealt with hurriedly and without proper attention.

19. The statistics of the Registration Department* have a more than departmental value owing to the light which they throw on the general economic conditions of the Province. The analysis of registrations affecting immovable property illustrates only too clearly the tendency for capital to seek investment in land rather than in the industrial development of the Province. The remarkable increase in the number and value of compulsory registrations of immovable property which was noticed in the years 1917—19 has been more than maintained in the three succeeding years. The number of compulsory registrations affecting immovable property has risen 26 per cent. as compared with the last triennium, while the value of the property affected has more than doubled since 1916. The number of optional registrations affecting immovable property in 1920-22 has decreased by 23 per cent. as against the figures for 1917-19, and the value of the property affected by optional registration has decreased by Rs. 22 lakhs, or considerably more than half of the last triennial total. This decrease is to be accounted

* See 1921-22 Report, I, 111.

for partly by the steady enhancement of land values which has made the registration of a greater number of transactions compulsory, and partly by a growing confidence in entries made in Revenue records, which are in many cases treated by the parties to a transaction as equivalent to registration.

20. During the triennium 1920-22 there was a substantial increase spread fairly evenly over the Province in compulsory registrations both of sales and mortgages of immovable property. The increase in sales is due to a variety of causes which range from speculation in land to poor agricultural and trade conditions. In Rawalpindi and Mianwali the profits accumulated by certain trading communities during the war, and in the latter the savings of soldiers also, were largely invested in land. All these facts serve to illustrate the increasing demand for land as an investment. It is difficult to draw conclusions from the figures relating to mortgages. A rise in the number of mortgages does not necessarily indicate agricultural depression. In the triennium 1920-22, property, due to failure of crops and fluctuations in prices, was no doubt responsible for the execution of many mortgage deeds. On the other hand, the possibility of obtaining enhanced profits from land led agriculturists to raise money by mortgage in order to extend their holdings. There was, moreover, a considerable reluctance on the part of owners of houses and sites in big towns to transfer them otherwise than by mortgage, as they expected that the price of landed property would rise again to the level to which it rose in the boom of 1919.

21. In the actual administration of the Registration Department the most noticeable feature was the introduction of revised scale of fees, which came into force from 1st January 1922. The number of documents relating to immovable property registered during this year and their aggregate value shewed a slight increase as compared with the figures for 1921. In Rohtak, and still more in Gurgaon, the decrease was considerable, the enhancement of registration fees having led to a considerable increase in the number of sales made by means of mutations only. This indicates that a point may be reached when increased fees will no longer bring in an increased income. In spite of this ten-

Increased income
from Registration.

despite there was nevertheless an increase of Rs. 1 39 lakhs in fee income on the preceding year due to the enhanced fees. The income of the Department increased by about Rs. 6½ lakhs from Rs. 12 65 lakhs in 1917-19 to Rs. 18 95 in 1920-22, while expenditure increased by about Rs. 2¼ lakhs from Rs. 4 58 to Rs. 6 79 lakhs, leaving an increase in the net income of Rs. 4 lakhs. A substantial part of the increase in net expenditure is attributable to the enhanced commission payable to Sub-Registrars as a result of the introduction of the new scale of fees referred to above. In view of the need for economy and of the fact that many of the offices of Sub-Registrars in the Province actually transact a very small amount of business which could be suitably dealt with by official agency, it has been decided to bring a number of Sub-Registrars under reduction as opportunity arises, where this can be done without inconvenience to the public. It was considered that the Registration Department should be able to produce considerable revenue at a comparatively small cost of collection, and in addition to measures of retrenchment the fees were in 1923 still further enhanced.

22. The Baluch Frontier has not yet completely recovered from the famine conditions of 1920 and 1921. The cattle census sufficiently testifies to the depletion of live-stock which forms the capital of the hill people and their only means of facing future difficulties. In 1921 *takari* (as a Government loan to agriculturists is called) was granted both in cash and kind, the latter in the form of wheat. But the method of relieving distress by *takari* is of doubtful value in the hill areas. Such grants are not used for productive purposes. Much of the money is absorbed on its way down and even that which actually reaches the people themselves is regarded by them as a free gift from Government. Recoveries are looked upon as taxation with unfortunate political effects. The realization of *takari* as of political fines provides the most difficult problem in the political working of the Derz Ghazi Khan district.

CHAPTER II.

THE LEGISLATIVE COUNCIL.

23. Written constitutions have a tendency to develop on lines which their framers did not anticipate. The practical working of American Presidential elections is on lines quite different from those intended by George Washington. Similarly, in the Punjab administration the distinction between reserved and transferred subjects* already shows a tendency to disappear. Many questions affect both reserved and transferred departments, and in practice it has been found impossible to discriminate. In the allocation of funds the distinction between reserved and transferred subjects has been treated as one between the beneficent departments of Government (Education, Medicine, Public Health, Agriculture, Industries, and Miscellaneous Scientific Departments), which are under the control of the Governor acting with his Ministers, and those which are either revenue producing or deal with the administrative machinery of Government, which are under the Governor in Council. Funds have indeed always been short.† But their allocation was easy till the budget of 1923-24 when money was very scarce.‡ After several conferences however the Members and Ministers came to an agreement amongst themselves without reference to the Governor. A substantial reduction was made in the expenditure of all departments, the allotment of the transferred provisions between the Ministers themselves being effected by mutual accommodation.

24. The Standing Committees of the Legislative Council form a valuable channel for the interchange of ideas between the Executive and the Legislature. The Standing Committee on Public Accounts is constituted by Statute, but others have been formed dealing with Finance, Land Revenue, Canals, Education, Public Health, Local Self-Government, Agriculture, Industries, Co-operative Societies, Police and Jails. Of these the most important and influential is naturally that on Finance. In addition

* See 1921-22 Report, I, 64.

† *Id.* I, 129.

‡ *Id.* II, 77.

to its advisory functions, the Council has delegated to it certain limited powers of reappropriation between grants already voted. It also advises on all proposals for new expenditure and is consulted by the Finance Department before the latter authorises recurring expenditure above a certain amount. Through the Finance Committee Government is enabled to ascertain non-official opinion on matters which are going to be discussed in Council. The proceedings of these Committees are informal and confidential, only the final decisions being recorded and published. The members of the Finance Committee have obtained thereby an insight into financial principles, which has enabled them to deal with financial questions in the Council. Besides the Standing Committees a few Special Committees have also been appointed on the recommendation of the House to deal with special questions, such as the award of compensation to martial law sufferers, the principles to be followed in assessing land revenue, financial retrenchment, Honorary Magistrates or the separation of judicial and executive functions, or popular matters such as the supply of milk and *ghi* or the educational needs of zamindars. The recommendations of these Committees have in certain cases been accepted by Government, which has in every case given them the fullest consideration.

25. In the strict scrutiny which it has made into all budget proposals for expenditure, the Legislative Council has not always succeeded in exercising effective financial control. In the debate on the budget of 1923, 2,000 amendments were tabled. But much time was wasted in the discussion of small reductions, and consequently many important grants had under the rules to be passed without discussion. Much suspicion was shown of demands for expenditure in the Forest Department, and there was a disposition to criticise the Agricultural Department, as above the heads of the people. The demand for Police was subjected also to criticism; but ultimately passed without any deductions except those to which the Member in charge agreed. On the other hand, the Education budget was passed without question. The reductions made by the Council amounted to Rs. 39 lakhs in the budget of 1922-23 and Rs. 28 lakhs in that of 1923-24. No item struck out has been restored by order of the Governor, but it has been

found necessary to ask for supplementary grants to make good certain reductions.

26 As was to be expected the Council has shown great reluctance in imposing new taxation. ^{Province has shown} There is a general feeling that the Punjab ^{has been over-assessed in its provincial contribution, and that it is to a reduction in that contribution that the Province should in the first instance turn for an improvement of the financial situation.} But the reluctance is mainly due to the general and natural dislike of the constituencies to any form of taxation. Such experience as members themselves have obtained of financial realities has certainly not penetrated to their constituents, and it is practically impossible for any member to convince the electors of the necessity for any increase of taxation whatsoever. Since the inauguration of the Reforms the Council has voted an increase of revenue of about Rs. 26 lakhs by means of amendments of the Court-fees and Stamps Act, but it negatived a Government motion to appoint a Committee of Ways and Means to examine methods for raising new revenue to meet the Provincial deficit.

27 But though careful in acceding to the demands of certain departments, the Council was ^{lavish in its proposals in other directions.} ^{Proposals for increased expenditure.} Increased emoluments for *lambardars*† and *zaildars*,‡ subordinate medical officers, and chaprasis, and an increased daily allowance for members themselves were proposed and carried by the Council, though these resolutions were not all accepted by Government. The most important of the financial liabilities assumed by the Council was, however, one of Rs. 20 lakhs levied on the city of Amritsar for damage done in the riots of April 1919, and one of Rs. 22½ lakhs for compensation awarded by a Committee to the sufferers at Jallianwala Bagh and elsewhere in the same riots. The financial powers of the Council are exercised subject to certain constitutional principles not explicitly stated but borrowed from the practice of the Parliament of the United Kingdom, such as one that reappropriation is not to be made towards a new service without the Council's consent.

* See 1921-22 Report, I, 122.

† *Id.* I, 157.

‡ *Id.* I, 264.

28 The Council was organized into three main groups: the Hindu, the Muslim, and the Sikh. The Hindu group was the largest and was definitely loyal to the side of law and order. Its loyalty was shown in its attitude to His Royal Highness the Prince of Wales and the Governor personally, while from the failure of a motion for adjournment in connection with the seditious meetings in Criminal Law Amendment Acts it may be inferred that it was not yet ready to support Government in taking strong action in an emergency. Racial questions were usually approached in a friendly spirit. A large number of the members of Council are landed proprietors of moderate means, and are thus typically representative of the Province as a whole. They are shrewd, cautious, and strongly imbued with the conservative ideas traditionally associated with the farmer class. The residential qualification in force excluded the carpet-bagger from candidature in 1920 and consequently all rural members were in close touch with the needs of their constituencies. Urban members were for the most part lawyers, with a sprinkling of commercial men and retired officials.

29 The Muhammadans in the Council were organized into a practically solid party of 35, prepared on most questions to follow the guidance of the Muhammadan Minister. As the Muhammadans mainly represent rural constituencies, they formed also the bulk of a rural party, which allied itself with rural Hindus and Sikhs, when questions arose which affected rural, as opposed to urban, interests. A proposal to facilitate the acquisition of land for industrial purposes was suspected by the rural members to foreshadow an attempt to repeal the Alienation of Land Act,* the Magna Charta of the Punjab zamindar, and was therefore rejected. But the chief aim of the Muhammadan party was to further in all ways the interests of the followers of Islam and to secure a greater share of representation in the public services and on local bodies for their co-religionists. Apart from the Muhammadan Minister there was no prominent party leader. The fifteen Sikh members were chiefly interested in questions which concerned their community, and as a

*See 1921-22 Report, I, 239, 541.

rule they voted on all questions affecting Sikhs in accordance with the wishes of the Shiromani Gurdwara Parbandhak Committee.*

30. The official members formed the only completely solid party. Fourteen in number, they were led by the senior member of the Executive Council. The theory that official members are at liberty to speak and vote as they please broke down, and it was not found possible to allow them full freedom to express their views and to vote as they liked. They were required to support Government by vote on a motion for adjournment when this amounted to a vote of censure, and also on any other vital matters, such as land revenue policy or any question involving peace and order. It was found essential that on all such important matters there should be complete unity among the official members.

* See 1921-22 Report, I, 656.

CHAPTER III.

LAND ADMINISTRATION.

31. The season of 1921-22 was on the whole favourable except in the east of the Province (Land Revenue, 1922, p. 119). This fact combined with high prices made the collection of large arrears of land revenue a comparatively easy matter. In the areas which comprise the Gurgaon and the greater part of the Hissar districts in the east conditions were very unfavourable, and but for the fact that the whole Province is now practically secured against famine by its magnificent canal system there would have been serious anxiety as to the possibility of famine conditions being established in these areas. The total amount of fixed and fluctuating land revenue to be collected was Rs. 417 lakhs, of which 407 lakhs were actually recovered. Of the fixed land revenue, it was necessary to suspend Rs. 4½ lakhs in Hissar, 1½ lakhs in Gurgaon and just over half a lakh in Rohtak and Sialkot. In all the other districts, not more than half a lakh in each case was suspended. Of the land revenue under suspension at the beginning of the year (amounting to Rs. 41½ lakhs) no less than Rs. 29 lakhs belonged to the previous year 1920-21 when the season was very unfavourable. Gurgaon, Hissar, Attock, Jhelum, Sialkot, Rohtak and Shahpur are the districts in which the largest amount of fixed land revenue is under suspension. In Gurgaon, Hissar, Attock and Jhelum the pitch of the land revenue is light, and their rules provide that the land revenue shall be suspended freely in bad years and collected again without scruple in good years. In these districts, in fact, the fixed land revenue sometimes approximates in character to fluctuating land revenue, so freely is it suspended and so easily are the sums suspended subsequently collected.

32. The fact that the land revenue of the Province as a whole is a very light burden is proved (Coercive processes, if a proof is necessary of what is really sufficiently obvious) by the fact that this large sum of over four crores is collected with the greatest ease. Over 14,000 coercive processes were issued during the year under report. Of these about 7,600 were writs of demand. These formal documents are called coercive processes only by a stretch of language. They amount to little more than a registered notice demanding payment, such as is frequently

issued by creditors against debtors both in this country and in other countries. Of the remaining 6,500 processes, the great majority of which were warrants of arrest or distress warrants, only 3,500 were actually executed, the majority of these being warrants of arrest. A mere recital of these facts is sufficient to establish the proposition that the burden is light, and that the people of the Province who pay this large sum so punctually must be essentially contented. The method of paying land revenue and other revenues by money-order is becoming increasingly important. Over 25 lakhs of rupees were paid by this agency during the year 1921-22. As may be expected, this means of paying money is normally used for small sums. For larger sums it is still found cheaper and more convenient for the revenue-payer to take the money to the nearest Government Sub-Treasury himself.

33 During the year 1921-22 settlement operations were being brought to a conclusion in the Pakpattan and Dipalpur tahsils of the Montgomery district and forecast reports were prepared for the Bhakkar tahsil and Saadat Miani villages in the Mianwali district, the Khangah Dogran tahsil of the Sheikhupura district and the Hafizabad tahsil of the Gujranwala district. Owing to the attitude of the Legislative Council towards the grant of funds for the re-assessment of the non-colony portion of the Jhang district, there was some delay in beginning of the re-settlement of that area. In the settlements now being conducted in the Province, Government is adhering to the promise made to the Legislative Council that the districts to be re-assessed should receive the benefits of any amendments of the law suggested by the Committee appointed to consider amendments of the Land Revenue Act and approved by Government. In none of the assessments made since the undertaking was given to the Legislative Council has the estimated amount of land revenue assessed exceeded one-third of the nett assets of each assessment circle.

34. *Patwaris** are still accounted as village and not Government servants; but their pay, formerly borne directly by the people themselves, is now a charge upon Government. and amounts to more than Rs 25½ lakhs. The cost of

Amalgamation of
Canal and Revenue
Staff on the Western
Jumma Canal.

* See 1921-22 Report, I, 269, for the functions of patwaris.

37 The modern tendency is to increase the work of *patwaris* an increasing burden of work which of which is only remotely connected with duties as petty officials of the Department of Land Reforms. Such, for example, is the work of procuring names of voters for the Council of State, Legislative Assembly and Legislative Council. It is plain that the greater the amount of this miscellaneous work the more necessary it is to have as *patwaris* men of a higher standard of intelligence, and of better education than formerly. It is not difficult for a man to fall into the routine of record-keeping and to perform his duties mechanically. It is much more difficult for him to do work which is outside that routine. Side by side with this necessity of having better educated men, there is the fact that there has been a nominal reduction in the standard of education by the introduction of the four-year school instead of the five-year primary school. The question of fixing a middle-pass standard for *patwaris* is therefore under consideration. It is essential that the standard of education should not be set so high as to lessen the supply of candidates of agricultural classes, nor should it be so low as to admit men who will not be able to perform satisfactorily the miscellaneous duties which *patwaris* are now expected to perform. Probably a solution will be found at first by only

§ Sec 921-22 Report I, 253

Id. 1, 435.

insisting on a middle-class standard in such tahsils in various districts as are educationally advanced.

36 The question of housing *patwaris* continues to cause anxiety owing to the difficulty of deciding how far Government should assume the responsibility for providing accommodation for *patwaris* and their records. In certain villages *patwaris* do undoubtedly find a difficulty in obtaining accommodation. In large villages and towns though accommodation can generally be easily got the *patwari* has to pay a considerable rent to obtain it. In a large number of villages the old tradition of the *patwari* as an official of the village community still subsists. In such villages the villagers willingly provide him with accommodation. It has, therefore, been difficult to formulate any general principle applicable to the Province as a whole. Before 1919 Government's responsibility in the matter was limited to providing housing accommodation in cases where it was clearly shown to be impossible for the *patwari* to provide himself with a residence. Expenditure on repairs was only granted in the case of serious damage from floods or other circumstances beyond the *patwari's* control. In 1919 the desire to remove discontent gave rise to more generous ideas. It was decided that where *patwarkhanas*, as *patwaris'* houses are called, did not already exist they should be provided by Government, and in all cases repairs should be carried out at Government expense. These ambitious projects were soon curtailed by the oncoming financial stringency, and at the end of 1921 this proposal was withdrawn and Government reverted to its original limitation of responsibility. As a matter of fact the construction of *patwarkhanas* had already outrun the arrangements for keeping them in repair. With the limited money available it has been considered desirable to limit activity in this direction to the maintenance of existing *patwarkhanas* and to defer the question as to whether new construction is desirable till funds are available for the purpose.

37. District revenue work is beginning to recover from the disorganization caused by war activities and the political unrest which succeeded. District officers have still, however, very little time to devote to super-

Necessity for supervision of the revenue work of subordinates.

vision, and their immediate subordinates tend to follow their example. Cases dealing with partition of land are unnecessarily delayed. Much litigation connected with the agricultural land is due to the fact that partition work has not been carefully and promptly done. Generally speaking, however, revenue records are sufficiently accurate and up to date for all practical purposes, but the object in view is now to keep them at such a level of accuracy that it may be rarely necessary to specially revise them. In that case it would be possible to greatly curtail settlement expenditure.

38. Colony officers have continued to be exercised with the discharge of the balance of the commitments already undertaken by the Punjab Government in respect of the distribution of the reward grants promised to Indian soldiers. About half of the area of 30,000 acres required to complete the scheme has been provided by the Government of India surrendering land which had been reserved to cavalry regiments for horse-breeding purposes, and it is hoped that the remaining area will be obtained from grazing grounds and *rakhs* in the various colonies. Horse-breeding on the Lower Jhelum Canal continues to provide difficulties. Though more mares have been covered yet less foals have been born. But the definite refusal of the Government of India to release the occupants from these conditions will have a good effect in removing the uncertainty which allowed matters to drift for so long. The proposal to pay rewards to good horse-breeders from the fines imposed on those who do not comply with conditions has been sanctioned by Government and should provide a stimulus to the zealous.

39. Temporary cultivation is the curse of the Canal Colonies. It is a potential source of great profit to subordinates, and offers temptations to them which it is difficult to resist. Its popularity is due to the low rates charged for *malikana*, i.e., the additional rent charge taken by Government from cultivators who have not acquired proprietary rights. Good land will easily sell for Rs. 400 per acre, and offers of a rent of Rs. 30 per acre matured inclusive of land revenue but exclusive

* See 1921-22, Report I, 200.

† See 1921-22, Report, I, 225, foll. II, 15.

of water rates have recently been received for land on the Upper Jhelum Canal. The peasant grantees in the later colonies are required to pay Rs. 100 per acre to obtain proprietary rights. There is, therefore, no justification for a lower *malikana* charge than Rs. 6 per acre matured on permanent grants, and still higher rates can fairly be charged for temporary cultivation. In the Lower Jhelum Canal Colony land was taken on this plea with no intention of cultivating it. The lessees merely turned on to their permanent grants the water sanctioned by the Irrigation Department for this extra area. Special provisions have had to be made to prevent this abuse in the future. As far as possible, however, steps are being taken to dispose of all inferior land. In this respect full attention is paid to the claims of the indigenous inhabitants, known as Janglis, who are quite good cultivators of bad land and are accustomed to a lower standard of living than the average Central Punjabi. They are, therefore, able to make a living on land that Central Punjabis would not look at, and the experiment of settling them on inferior lands shows every prospect of being successful.

40. The finances of colony towns have continued to receive attention from Government. In the later colonies the towns had received a guarantee of grants-in-aid for development purposes up to a total of half the proceeds of the sale of sites for five years subject to a maximum limit. A further guarantee was proposed of a quarter of the subsequent proceeds of sales of Government waste in the old colony towns and a half of the proceeds in the case of towns established in purchased areas. Government, however, was unwilling to involve itself in so definite an obligation. It has, however, agreed that applications for grants out of the sale-proceeds after the expiry of the original guarantee shall be considered on their merits. In the later colonies the building of new villages continues. The superior construction and cleanliness of the military villages are noteworthy. The administration of village sites is a special and particularly difficult part of colony work. Close control by Government is necessitated by the fact that all unallotted land is the property of the State. In non-colony villages there is no separate record-of-rights of village sites. But in colony villages such a record is main-

tained and kept up to date under the notation procedure. Such a record has only recently been completed in the Lower Jhelum Colony, but is in existence already elsewhere and is under preparation for Lew estates. An experiment entrusting the management of village sites to a Village Committee was introduced in the Lower Jhelum Colony with the object of relieving the District staff. But it proved unsatisfactory and had to be abandoned.

41. For large agricultural exporting areas, such as the Canal Colonies, the problem of communications is vital. The main railway artery connects each colony with the outer world, but internal communications by road are still most inadequate. Through communication by road is almost non-existent and the disconnected *pakka* roads leading to railway stations are generally in very bad repair. Carriage of goods by railways renders traffic on these roads particularly heavy, and this necessitates considerable expenditure in order to be kept in good order. As in the case of Canada and United States road communication in the colonies suffers from the fact that railways have been built before the road system has been developed. In such cases there is always a tendency to neglect this important branch of communication.

42. The Estates under the superintendence of the Court of Wards^{*} shared in the agricultural prosperity of the year 1921-22 and their total annual income rose by three lakhs to Rs. 25½ lakhs. The increase would have been greater but for the slump in the price of grain, as a result of which large stocks of *rabi* produce were retained unsold. There was, however, no corresponding increase in expenditure—in fact, there was a shrinkage of over two lakhs to Rs. 22½ lakhs. The decrease of a lakh in ordinary expenditure was due to a more normal personal expenditure on the part of one of the wards after return from England. The similar decrease in capital expenditure is ascribed to a natural caution on the part of Managers to propose additional expenditure at a time of falling prices of agricultural produce. Thus only Rs. 21,000 was spent on purchase of land and houses against a lakh in the previous year and nothing

* See 1921-22 Report, I, 272.

at all on purchase of Government securities as compared with a lakh and a quarter before. The result was that the Treasury cash balance rose by three lakhs to Rs. 11½ lakhs. This large balance, together with the proceeds of the unsold grain stocks valued at Rs. 4½ lakhs and the equally good income expected for the current year, presents an opportunity for strengthening the permanent resources of the Estates.

43. Satisfactory progress was made in the ordinary administration of the Estates. Reduction of debt went on according to plan. Particular attention was paid to permanent improvements on which a larger sum was spent than in the previous year. The relations with tenants continued to be amicable. There was a small increase in the total arrears of recoverable rent due to the reluctance of the tenants or lessees to sell their grain, but no real difficulty is anticipated in their eventual recovery. On the other hand, the prevalence of *batai** rents enabled the tenants to share in the prosperity of the Estates. Advanced agricultural methods were as usual fostered on the great Estates. In one Estate Co-operative Societies were encouraged, and a Supply Stores, which supplies the agriculturists with ordinary articles of consumption at reasonable prices, and is backed by an interest-free loan of Rs. 5,000 from the Estate, made a promising start and appears to fulfil a real need. The education and training of the Wards, which is as much the object of the Court as the administration of their Estates, was sedulously prosecuted. Seventeen wards and their relatives were at the Aitchison College, for the sons of Punjab Chiefs, one at the Lyallpur Agricultural College,† three at Queen Mary's College, a preparatory school for boys of good family, and nineteen at local schools. As many of the older wards as is possible are gradually associated with the management of their Estates, and one has been given the powers of a Deputy Commissioner under the Court of Wards Act as a stepping stone to full control of his property.

44. Loans for land improvement continued to be granted somewhat sparsely. In the year 1921-22 only Rs. 4 lakhs were distributed, mainly for the construction of wells for irrigation pur-

* See 1921-22 Report, I, 219, 515.

† See 1921-22 Report, I, 522.

poses. But the general tendency in the Province is to rely for such assistance less upon State aid and more upon co-operative Societies and private finance. Loans for temporary agricultural purposes only amounted to Rs. 20 lakhs, of which Hissar took Rs. 3½ lakhs and Gurgaon nearly Rs. 3 lakhs. Such assistance is confined to districts of this type, where the people are thoroughly familiarized with this kind of relief. As a rule, these loans are faithfully devoted to the purpose for which they are granted and punctually repaid with interest. There is no better way of helping the people than by the grant of these loans provided that care is taken that the loans do not become gifts. That way pauperisation lies.

45 The mortgage debt of the Province amounts to 37 crores of rupees and comes to nearly Rs. 127 per cultivated acre. The total cultivated area mortgaged being 20 lakhs acres. The average land revenue of the Province is slightly under Re. 1-5-0 per acre cultivated so that the mortgage debt per cultivated acre is equal to 85 years' purchase of the land revenue. It is impossible to arrive at any accurate generalisation from the existence or non-existence of mortgage. In an agricultural community where property is fluid and improvements are in progress, a high mortgage figure may indicate the alertness, industry, and business capacity of the farmers. Where communications are bad and methods of farming medieval, a similarly high figure may indicate the exhaustion of the peasantry. Instances of each of these two types of community are to be found in the Punjab. But even in cases, such as the Lyallpur district, where the mortgage debt does not press heavily on the agricultural population, it is extremely doubtful whether it is contracted for productive purposes and is not merely a form of extravagance indulged in by wealthy landowners. The average price of cultivated land has risen from Rs. 345 per acre to Rs. 385, the highest figure on record. This continuous rise is due partly to the fact that agricultural produce commands, or at least during the year 1921-22 commanded, very high prices; partly to the markedly increasing land hunger among the representatives of that class of society which in times past was content with trade, and the profits therefrom, and not a little to the restrictions of the Punjab Alienation of Land

Act which have greatly diminished the area available for sale to the general public.

46. The Drainage Board† did useful work during the year 1921-22 and is now devoting its ^{Waterlogging the} ^{Drainage Board,} attention to problems connected with the security of the Gurgaon district and the prevention of waterlogging in the areas irrigated by the large canals to the west of the Province. Much of the work involved is of a highly scientific character, and the Board has therefore sent a student to go through a technical course of training at the Lawes Agricultural Trust, Harpenden (England). This young man is reported to be making good use of his stay in England, and the training he is now receiving should be of value to the Province in the future. The problem of waterlogging is one which is becoming increasingly important because of the recent great extension in the area affected. The upper portions of the Upper and Lower Chenab Canals pass through low-lying areas, which have become permanently waterlogged. By the widening and deepening of old drainage channels and the opening of new ones further damage has been prevented in the Hafizabad and Wazirabad tahsils of the Gujranwala district, and some spoiled land has again been brought under cultivation. In the Sialkot district, however, there has been less success, and it is stated that the drains were not of sufficient depth and are consequently of doubtful utility. In the Shahpur district waterlogging continues in some villages in the Bhalwal tahsil, and is being dealt with by the Canal Department, which is arranging to drain off the water of the affected area into the Budhi Nala drainage channel.

47. In the Ambala Division the rapid deforestation of the hills is bringing problems of its ^{Hill deforestation} ^{and its consequences.} own. With the destruction of the forest the soil is eroded and the water precipitated by the rains in the hills instead of being stored in the sub-soil is rapidly washed away in destructive torrents. The plains below suffer alternatively from floods and drought. Such is the cause of the unhealthiness of the notorious Naili tract of the Guhla sub-tahsil in the Karnal district. Population is diminishing and agriculture is deteriorating to an alarming extent for

* See 1921-22 Report, I, 239.

† See 1921-22 Report, I, 204.

want of men and resources. Consequently cultivation is decreasing, though grazing is abundant and the zamindars chiefly rear cattle which are, however, more distinguished for quantity than quality. People are generally poor, and the number of the *kamins* (village melials) is diminishing owing to disease and emigration. The Nauli and Chirchora tracts of the Thanesar tahsil suffer in the same way. Being the breeding grounds of mosquitoes they are saturated with malaria. Many villages are waterlogged, while others suffer from shortage of water. A well organised scheme of irrigation and drainage seems indicated, and the regulation of the Mar'aud's torrent seems also a necessity. A commencement has been made. Canalization of the Sarsuti has been undertaken in various places. The root of the evil, however, lies farther back in the deforestation and denudation of the Siwaliks higher up. Until this is stopped the land of Kurukshetra can never be restored to its ancient prosperity. Similar causes have led to similar results in the Nuh tahsil of the Gurgaon district where to the deforestation of the hills must be added the damage caused by the neglect of the *bands*, which form such a prominent feature in the agriculture of the district. A beginning has, however, been made towards tackling the problem by the opening of a drainage sub-division under the Drainage Engineer. Money is urgently wanted for re-afforestation as soon as schemes can be drawn up for the relief of the flooded area and the development of the *bands*. In the Ambala district the work of reclamation of deforested areas is proceeding slowly.† Over 40,000 trenches and dams were constructed and planted with *kikar* and *hisham* and in some places with *kikar* and *bubar*. Ample rains in September compensated for the drought of July and August 1922 and germination was satisfactory throughout, though some of the dams were washed away. A portion of the area reclaimed was fenced with thorn bushes and produced a useful crop of grass.

48 Another area which has deteriorated with astonishing rapidity is the *khadir*, or low-lying tract, in the Ballabgarh and Palwal tahsils of the Gurgaon district. The causes of this deterioration are not known for certain. A preliminary report is being drawn up by the District autho-

Other causes of deterioration.

* See 1921-22 Report, I, 300. II, 99

† See 1921-22 Report, I, 261.

ities with a view to obtaining orders for the revision of the assessment in the *dhari* circle of Nall, as it is represented that the decline in prosperity is so great that the assessment is now far too heavy. As usual the action of the great rivers of the Punjab accounts for some deterioration on their banks. Erosion has taken place on the eastern bank of the Indus in the Mianwali tahsil of the Mianwali district, while continued floods caused some deterioration in the riverain area of the Bhakkar tahsil. In the Montgomery district, on the other hand, the damage has been caused by the dearth of floods from the Sutlej and Ravi rivers. Land has gone out of cultivation, and the villages in the riverain tract present a deserted appearance. In some places the land has become overgrown with the thorny *pohli* weeds, which affect the yield of wheat a good deal. This last evil is, however, due as much to the sluggish habits of the zamindars as to the malevolence of Nature.

49. The condition of the agricultural population was generally good, though there was a serious outbreak of relapsing fever in the south-west of the Province—particularly in Muzaffargarh. Economically the condition of agricultural labourers is improving. The high wages offered in the Colony areas act as a magnet to draw labour from the surrounding districts, where in some cases landlords suffered from a dearth of necessary labour and had to reduce rents in consequence. The situation is particularly acute in districts such as Kangra, where bad communications prevent the development of a progressive system of agriculture, and whence therefore a large continued emigration is taking place to the Central Punjab. Similar causes are diminishing the population of the Gurgaon district, though in this case there is reason to believe that the diminution is due as much to the scanty supply of births caused by the unhealthiness of certain parts of the district as to the economic causes producing emigration. The Hindu money-lender has in certain areas restricted credit owing to the fall in prices and has done his best to recover his loans through the Civil Courts—a procedure which renders the situation of the zamindar still more difficult.

* *Oarthus oxyacantha*, a near relation of the carthamus which yields the saffron dye.

CHAPTER IV.

LOCAL SELF-GOVERNMENT

Walk even the peasant boasts this independence,
And 'tans to ve estate on self's small

GOLDSMITH—*Letter*, 133

50. Even before the introduction of the Reforms Scheme the Punjab Government had taken steps towards a substantial reform in Local Self-Government. With the introduction of the Reforms the Department of Local Self-Government became a transferred department under the control of the Minister for Education. Acts were passed increasing the powers and independence of District Boards and Municipal Committees. By the Village Panchayat Act of 1922 it is hoped to restore to a large extent the traditional form of village communal self-government. The official and nominated element has been greatly curtailed on all local bodies. Tahsildars are no longer *ex-officio* members of District Boards; and Municipalities have been encouraged to elect non-official Presidents and Vice-Presidents. The District Board franchise has been broadened and made uniform all over the Province. Nominations to local bodies, now as before, are made chiefly with the object of securing the services of useful workers who are unable or unwilling to be returned by the election of their fellow citizens. Where communal representation prevails, care is taken not to disturb the balance of elected seats apportioned to the various communities; in other cases nomination is utilized to secure the representation of minorities who might otherwise remain unrepresented.

51. Perhaps the most interesting though still the least important form of Local Self-Government is to be found in the village. For in India has been preserved better than anywhere else in the world the most ancient self-governing unit, in the Village Community;† and of all Indian Provinces the Punjab preserves this organic growth in its most vigorous form. For some time the feeling has been growing that unless the Village Com-

*See 1921-22 Report, I, 159.

†See 1921-22 Report, I, 156-158.

mainly as represented by its *panchayat* were given some legal form there was a danger that an organic growth, which has called forth the eulogies of philosophers and historians might wither away. The *Panchayat Act* of 1912 made an attempt to give civil powers to so-called *panchayats* which were really only arbitration committees. But these powers were limited to suits where both parties agreed to take their cases to *panchayats*, and were practically ineffective. More and more the opinion grew that the extensive litigation which prevails in the Province is not only a social evil but is also a source of great economic loss and frequent origin of serious crime. In order to counter this evil *Sanitation Societies* were founded by the Government under which disputes could be settled by arbitration without the intervention of a Court. The success which was achieved attracted attention of other provinces and even in journals published in England. These Societies were however closed down in view of the passing of the Village Panchayat Act of 1921. The Act aims at providing bodies with powers which will enable them to settle petty disputes and take measures for the sanitation of villages. The Act places on a modern legal basis the very old institution of the *panchayat* which in one form or another still exists in many parts of the Province.

52 But it is mainly in the local bodies to which the Government has entrusted that the new principles underlying the Reforms have been introduced. The system of elections has been introduced in 11 Districts Boards' whose members were formerly purely nominated, in the remaining 17 the elected element has been increased and in all the official element has been reduced. The franchise has been made uniform throughout and placed on a more logical basis. This reconstruction has undoubtedly increased public interest in the activities of the Boards. In districts such as Kangra, where the rural classes are non-vocal and where public opinion was previously voiced by the Tahsildars, the absence of these officials is reported to have removed a valuable contribution to District Boards' discussions. In the more advanced districts, however, the

Education, Medical Relief and Communications. The Department had little time to spare for District Board finance from his other multifarious duties. The different services bid against each other in their anxiety to induce expenditure. Education bid highest and got the lion's share, next came Medical Relief, while Communications were left with what remained over.

54. As a result of this policy, while the income of the Boards since 1912 from all sources has doubled, the grants from Government have trebled. Since 1902 the income has quadrupled, and the grants are 27 times larger than they were. These figures are doubtless open to certain explanations and modifications, but the fact remains that local finance has become more and more dependent on provincial grants. The local rate which represented two-thirds of the income twenty years ago, now represents one-third only. This is a state of things which in itself is undesirable and it is the more so, as it is impossible for the Provincial Government to afford even what it gives at present. It is itself dependent for its own maintenance on overdrafts from the Imperial Government, and however much it may wish to encourage increased activity in local bodies, it has no funds at its disposal, with which it could help to finance them. In 1921-22 the financial position of District Boards reached its nadir, but in 1922-23 by increased taxation and diminished expenditure on essential services, as Communications and Medical Relief, income has just managed to balance expenditure*.

55. The *Haisiyat* or profession taxes† imposed on those who do not pay Land Revenue are beginning to prove a valuable source of income to some District Boards which in some districts realise as much as half a lakh, by this tax. Though unpopular with the classes assessed they are welcomed by the rural community as removing the injustice by which those who benefited most from District Board expenditure used to contribute nothing towards it. But great difficulties are felt in the equitable assessment and collection of this tax by unofficial agencies.

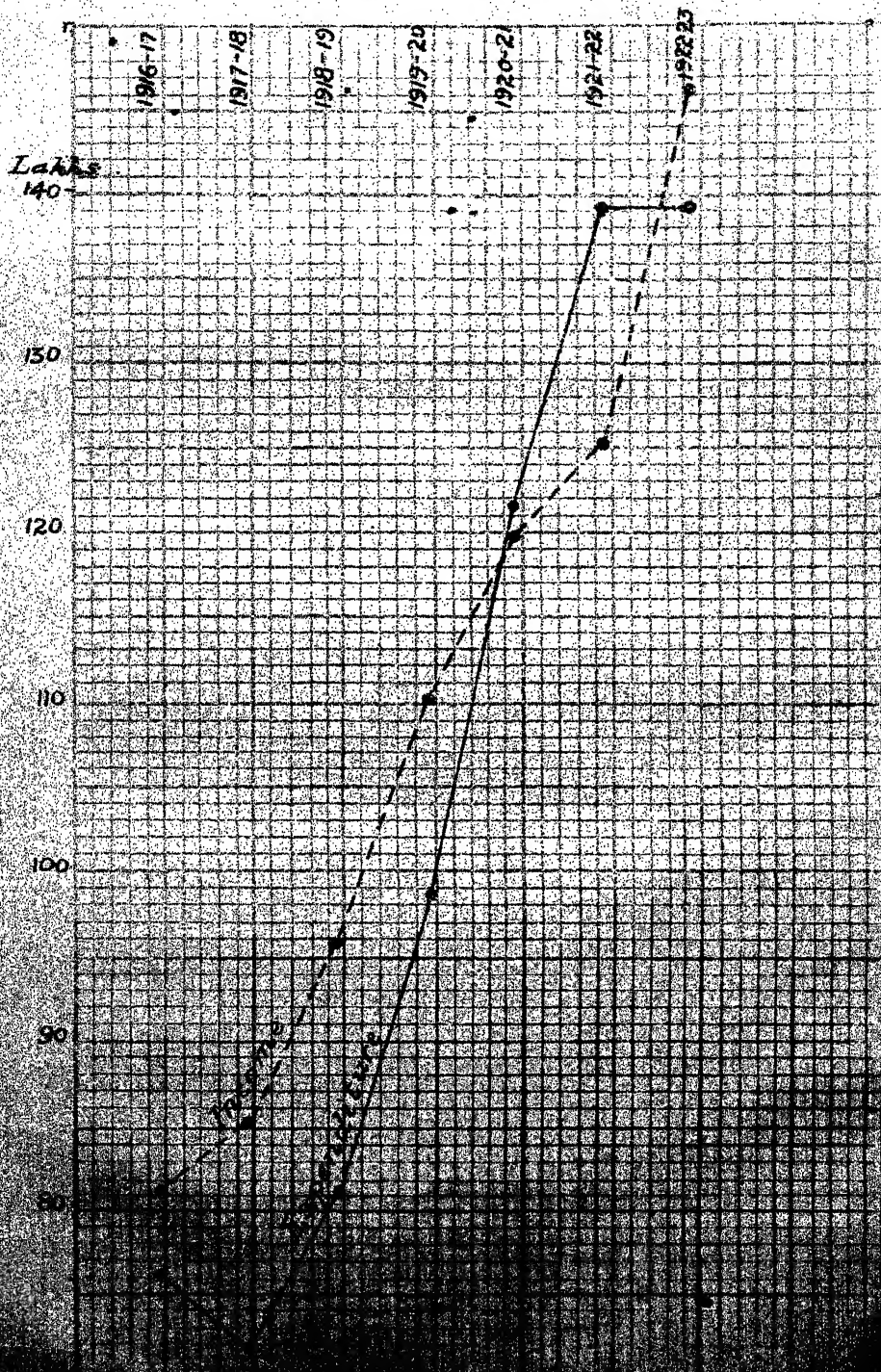
56. The growing importance attached to Education is evidenced by the increased percentage of expenditure on it, and it is in this connection that the cry for increased Government grants and general expansion rings loudest. It is here, therefore, that the possibilities of economy and the necessities of advancement need most careful balancing. In all districts there has been an increase in the number of students, and the

*See graph.

†See 1921-22 Report, II, 221.

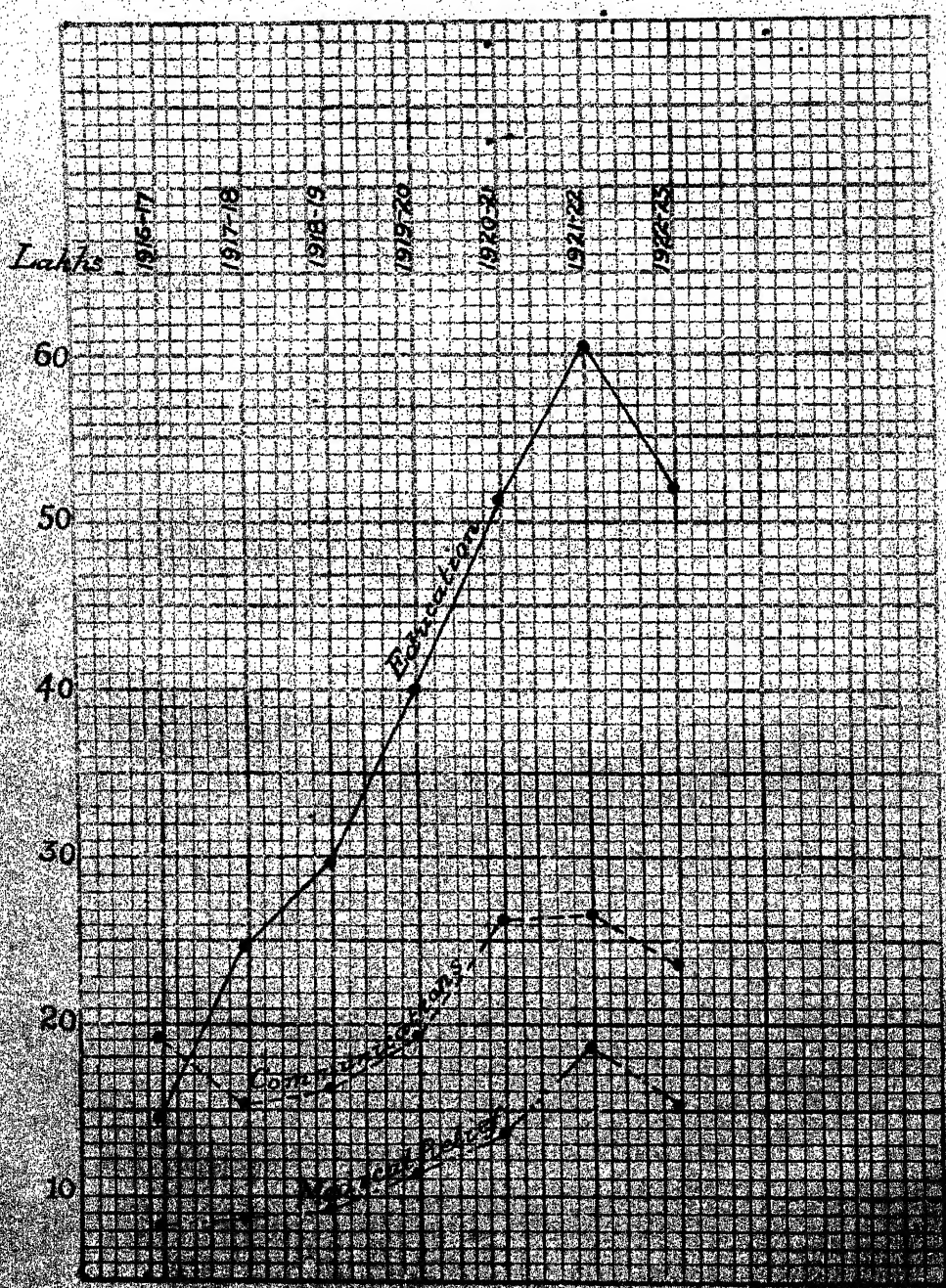
GROSS INCOME AND EXPENDITURE OF DISTRICT BOARDS

Opening balances are excluded.



MAINHEADS OF DISTRICT BOARD EXPENDITURE

Civil Works expenditure is shown under these heads



liberality of Government has provided a proportionate increase in the teaching staff. All this means an increased expenditure, which the financial position of the District Boards can ill afford. That there is a way out of the difficulty is shewn by Kulu, a poor sub-division, where Rs. 10,000 was raised by public subscription towards a high school, by Jhelum, where a single donation of Rs. 25,000 saved schools from being closed down, and by districts like Gurgaon and Montgomery, where the public have similarly risen to the occasion.

57. Under the influence of modern scientific thought public opinion is gradually realizing that a high standard of public health can be better secured by spending money on the prevention of disease than on its cure. Preventive work though not yet universally popular is often appreciated, especially where the principles of public health have been popularised by village propaganda with the magic lantern.

58. Expenditure on Communications has this year been more than ever restricted. Despite railways, telegraphs, motor-transport and other expedients undreamt of in older days, difficulties of communications still persist as a formidable obstacle to the progress of modern industry. Unceasing effort and expenditure upon a scale hitherto impossible will be necessary if the communications of the Punjab, whether by road or by rail, are to be adequate to the requirements of the country. The utilization of mechanical transport for military and other purposes has continued to develop. But the use of mechanical transport depends upon increasing improvements in road communication. Moreover the economic loss caused by the inaccessibility of many agricultural districts in the rainy season is considerable; and this cannot be remedied until the system of trunk roads is further developed. This matter is under the consideration of the Communications Board. The present unsatisfactory condition of this vital necessity for the welfare of the country is to a certain extent due to the tendency of local bodies to spend a disproportionate share of their resources on other matters rather than upon Communications. There is a danger that unless suitable measures are taken in time the highway system of the Punjab so far from extending in accordance with the needs

of the country and the increase of motor transport, will in the near future fall into serious disrepair.

59. Even before the Reforms in the great majority of Municipalities* some of the Municipal Commissioners were elected. In the larger Municipalities representation was in general by wards or classes of the community, or both. The constitution of each Municipality was dealt with on its own merits and was framed with regard to the peculiar circumstances of that locality. It was only on special representation that changes were made at all. But with the Reforms every thing has been systematized. Formulæ have been adopted regulating the total number of members in each Committee and the distribution of the elected seats on Municipalities amongst the various communities. The most difficult problem was to discover a formula which should graft the democratic principle of the Reforms on the concrete facts of municipal administration in the Punjab. The formula adopted was that "the elected seats on municipal committees should be distributed among the communities in proportion to their population as modified arithmetically by their voting strength."† These arrangements caused a good deal of discontent amongst Hindus who under the previous system of distribution had a representation more than proportioned to their population and voting strength. The electoral system is also being introduced in practically all Notified Areas, which included places which were too large to be considered villages and yet hardly large enough to be called towns. These will in future become Small Towns and will also receive a more or less democratic constitution.

60. Communal friction has done much to prevent the efficient working of Municipal Committees. In the arena of local self-government, the non-cooperation party has not only failed to effect Hindu-Muhamadan unity, but has even directed its political fervour into communal channels, and non-official presidents are often opposed for purely communal reasons. Apart

* See 1921-22 Report, I, 162-63.

† In other words community percentages were taken by population and by voting strength, and elected seats on Municipal Committees were distributed among the communities in proportion to the arithmetic mean of the two percentages, e.g., if Hindus constituted 20 % of the population and 40 % of the voting strength, they would be entitled to 30 % of the representation.

from communal bickerings, the administration of Municipalities is too hide-bound by routine and abstract theory. The important question of milk supply is neglected and the terrible condition of the roads in most municipalities is a striking witness to the indifference of the members to matters of practical importance. Encroachments are rife and are often due to the connivance of members. But in spite of these difficulties some Committees resent Government interference. This is perhaps a phase that will disappear when it is realised that in English and other democratic countries the popularization of the Central Government is usually followed by a stricter supervision of local self-government.

61. While in 1921-22 the total expenditure of Committees exceeded the total income by Municipal Finance. Rs. 7½ lakhs, in 1922-23, the total income exceeded the total expenditure by nearly the same amount. The improved position is due to increased receipts from octroi and terminal tax, consequent on removal of the boycott of foreign cloth, improved trade and improved supervision by the octroi staff. Generally speaking the Municipalities in which the terminal tax is in force are in a better financial position than those in which octroi is collected. Octroi by interference with trade tends to kill the source of its own life, while the system of refunds under which the octroi on imported goods which are re-exported is returned, offers obvious temptations to dishonesty.

CHAPTER V.

PUBLIC HEALTH

FOR RIDDH

In 1922 was an exceptionally healthy one in the Punjab. On the economic point of view conditions were favourable, rainfall was heavy, harvests etc. on the whole good, and the prices of food grains were on a level not so prevalent in 1921. The public health conditions were on the whole improved from the preceding year, but only slightly affected by the cholera epidemic. Plague increased considerably, only 5000 cases in 1922 as against nearly 3000 in 1921. Although the outbreak was considerably less severe than in 1919 when the number of deaths from plague approached 13000 the increase in incidence and area affected is distinctly ominous. Cholera appeared only in a very mild form, and was responsible for only 128 deaths as against over 19000 in the preceding year. The low mortality from cholera is the more remarkable in view of the fact that cases were reported from thirty-three centres in sixteen districts. Of these centres twenty-eight were connected, directly or indirectly, by cases imported from outside the Province. The remaining five outbreaks were undoubtedly of indigenous origin, and the Director of Public Health considers that it is now definitely proved that although infection usually starts from imported cases, the cholera carrier exists in the Punjab, and is capable of starting a purely indigenous focus of infection. The most dangerous outbreak of cholera which occurred during the year was among the pilgrims at the Sun-eclipse fair at Thanesar. The number of pilgrims present at the fair was estimated at half a million, but owing to the energy of the Public Health Department the outbreak was stamped out with a loss of only eight lives and without any subsequent dissemination of the disease. The statistics for the period 1867—1921, disclose the interesting fact that cholera causes a much greater proportionate mortality in towns than in villages, a fact which is in favour of the assumption that in urban areas the disease is spread by infection of the common water supply.

The mortality in the city of New York

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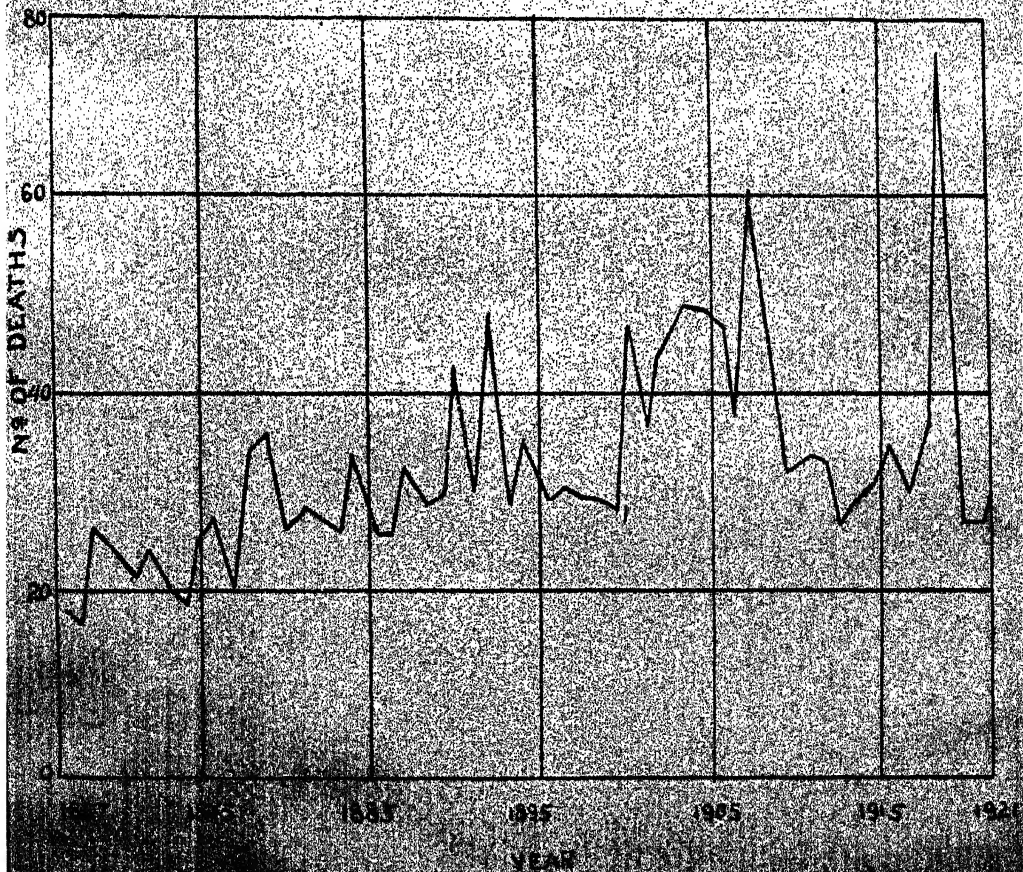
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* See graph appended

CHAPTE V.

NUMBER OF DEATHS IN THE PUNJAB PER MILLE OF THE POPULATION ALL CAUSES



ease is spread by infection of the common water supply.

The mortality from fevers was, as usual, high, though there was a great decrease in the number of deaths reported as against the preceding year. Relapsing fever appeared in several districts, and though not responsible for many deaths, has given rise to considerable apprehension. Measures are being taken for the early diagnosis and treatment of this disease. The number of deaths from smallpox fell from 4,575 in 1921 to 1,608 in the year under report. The figures for the years 1867—1921 disclose a general tendency towards a decrease in the mortality from smallpox, a result which can fairly be attributed to the preventive measures consistently applied to the disease by the Public Health Department.

63. During the year 1922 further advance was made in the analysis and interpretation of the statistics now available for the period 1867—1921. Investigations were carried out by the Public Health Department in collaboration with Mr. S. M. Jacob, Census Superintendent. The investigation of the general death-rate for the period 1867—1921* discloses a very unsatisfactory state of affairs. The general death rate, whether due to physiological causes or to a better reporting-agency, rose, on the whole, from 1,867 to 1,890; since then it appears to be on the whole fairly stationary though there was a great mortality in 1908 and 1918. It must therefore be admitted that during the past 55 years medical endeavour has failed to favourably influence the death rate, for we have a high stationary death-rate subject to the most violent epidemic fluctuations. If the Punjab graph be compared with the corresponding graph for England and Wales the difference is as striking as it is instructive. From 1875 onwards the English curve shows a steady fall, the present death rate being almost a model one. The explanation of the difference between the two curves is easily arrived at. In 1875 England introduced the policy of State Organised Preventive Medicine which she has been steadily perfecting ever since, and until the introduction of the National Insurance Act, spent little in the way of money or effort on what is conventionally termed "Curative Medicine". Money and effort were directed chiefly to Prevention, the existing model death rate being the result. The Punjab.

* See graph appended.

on the other hand, until 1919 never had a definite, clear-cut policy of State Organised Preventive Medicine. During the past 55 years money and effort have been directed mainly to Curative Medicine, the result being displayed in the graph.

64. Financial stringency prevented any marked extension in curative medical work during the year 1922. A period of consolidation succeeded to the rapid expansion of the last three years, during which over 100 new dispensaries were opened, making a total of over 600 hospitals and dispensaries from whom nearly 6 million patients received treatment during the year 1922. During the last five years the total expenditure on those hospitals and dispensaries, to which Government contributes, rose from Rs. 16 to 33 lakhs. The amount contributed by local bodies increased from about Rs. 12 to 22 lakhs in 1921 and 1922. The limit which local bodies are prepared to spend on medical relief has now been reached, and it is doubtful whether the five years' programme of dispensary expansion, which has been formally approved by most District Boards, can be carried out in practice. By means of Itinerating Dispensaries, it is however hoped to afford a more wide-spread relief at a cheaper cost in rural areas. Of the total expenditure on curative medicine Rs. 2.7 lakhs was devoted to the care of 846 lunatics in the Punjab Lunatic Asylum. It is interesting to note that nearly Rs. 17,000 of their expenditure was recovered from the goods manufactured by the lunatics themselves.

65. At the cost of Rs. 2 to 2½ lakhs per annum about nine hundred thousand people in the Punjab are vaccinated in a year.* Assuming that vaccination protects the individual for seven years this affords protection against smallpox to nearly 1/3rd of the population of the Punjab. The spread of vaccination has checked the ravages, and consequently the fear, of smallpox and the last triennium has shown a diminution in the number of revaccinations though primary vaccination has increased in comparison with the previous triennium. Some opposition was experienced in the South-

*See 1921-22 Report, I, 100, 102 for the organisation employed for vaccination pur-

Eastern districts on account of the non-co-operation movement, but by tactful propaganda the Medical Officers of Health generally succeeded in overcoming it. The demand for vaccine from the Punjab Vaccine Institute fell off at the close of the war but is now steady. A modification has been introduced into the original system of lymph cultivation by the introduction of a rabbit in the cow calf-buffalo calf cycle. This will result in a great increased yield of lymph by the stock vaccinifers.

CHAPTER VI.

EDUCATION.

... on the ...
... of the ...
... into ...
... again

POPE.—*Essay on Criticism*, ii, 15.

66 The year 1922-23 has been, in the main, a time of harvest for the Education Department. The seed that was sown some years ago by the formulation of the five years programme for the expansion and improvement of vernacular education has now grown to ripening. The main efforts of educational workers have therefore been devoted to the reaping of the harvest and to ensuring that the abundant crop shall not run to waste under the influence of financial stringency. The appended statement gives an abstract of the educational expansion of the last ten years:—

Number of Scholars (thousands).

	1911-12.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.
PUBLIC INSTITUTIONS.								
Males.								
Arts and Professional Colleges.	3	5	6	6	6	6	6	6
High Schools.	48	54	55	59	65	72	78	83
Middle Schools.	46	57	57	57	1,00	1,13	1,33	1,65
Primary Schools.	1,80	2,40	2,43	2,47	2,28	2,39	2,70	3,50
Special Schools.	3	4	4	5	4	4	5	23
Total	3,20	3,06	3,65	3,74	4,08	4,39	4,90	6,27
Females.								
High Schools.	3	3	3	3	3	3	3	3
Middle Schools.	5	9	9	11	11	12	11	11
Primary Schools.	29	42	42	43	46	46	48	51
Special Schools.	1	1	1	1	1	1	1	1
Total	37	55	55	58	61	62	63	66
PRIVATE INSTITUTIONS.								
Males	47	42	37	34	42	43	50	58
Females	17	14	12	11	12	13	24	26
Total	64	56	49	45	54	56	74	84
GRAND TOTAL	3,81	4,77	4,69	4,77	5,18	5,57	6,27	7,77

* See 1921-22, Report, 430 foll.

It will be noticed that education is now becoming primarily to the expansion of primary education. This is also illustrated by the statement showing the distribution of scholars by religion.

Scholars by Religion (in thousands).

	1910-11	1911-12	1912-13
1910-11	17		7
1911-12	11	2	70
1912-13		12	8

The rapid rise in the number of Mohammedan scholars is a satisfactory indication of the spread of primary education among the rural and poorer urban classes. A further discrimination between the rural and urban classes of the different communities could show even more clearly how far practical effect has been given to the intention of spreading education among the rural classes under the five years programme.

67. One result of the Reforms and of the consequent financial stringency has been the devotion of greater attention to the important problem of educational finance. The financial stringency of to-day is ill-suited to the general desire for the expansion and improvement of education. A careful scrutiny of educational expenditure is therefore imperative. How far this is being done will be seen from the following statement :—

* The apparent fall in the number of those receiving primary education in 1919-20 concurrently with a large expansion in the corresponding number of middle schools is explained by the raising of many primary schools to the middle status at the time.

Expenditure (lakhs of rupees).

	1911-12.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.
PUBLIC INSTITUTIONS.								
<i>Males.</i>								
Arts and Professional Colleges.	8	11	12	13	13	16	18	20
High Schools	13	20	21	23	27	32	36	39
Middle Schools	5	10	10	11	16	22	26	28
Primary Schools	9	16	17	19	20	24	27	29
Special Schools	2	4	4	4	5	6	8	9
Total	37	61	64	69	81	100	115	125
<i>Females.</i>								
Colleges	...	...	...	...	...	...	...	1
High Schools	1	2	4	3	3	3	3	3
Middle Schools	1	2	2	3	3	3	4	3
Primary Schools	2	4	4	4	5	6	7	7
Special Schools	2	1	1	1	2	2	2	2
Total	6	9	11	11	13	14	16	16
Total direct expenditure	43	70	75	80	94	114	131	141
Direction and Inspection							9	9
Universities							8	6
Buildings, Scholarships and Miscellaneous.							47	64
Total indirect expenditure	26	39	40	44	48	70	59	79
GRAND TOTAL	69	109	115	124	142	184	190	220

The extent to which economy has been taken into consideration will be seen from the fact that the percentage increase in expenditure on primary schools is only a quarter of that of the increase in the number of scholars. The increase in expenditure this year mainly comes under the heading of buildings, due to the purchase of property on important central sites to the amount of nearly Rs. 10 lakhs from the Cathedral in Lahore and Church Missionary Society in Multan. The sources from which educational expenditure is met will be seen from the statement below :—

General summary of expenditure on Education, 1922-23.

				PERCENTAGE OF EXPENDITURE FROM			
				Government funds.	Board funds.	Fees.	Other sources.
Direction and Inspection	...	...	...	84	16	..	...
Universities	...	...	...	17	...	72	4
Miscellaneous	...	...	...	55	18	11	21
INSTITUTIONS FOR MALES.							
Arts Colleges	...	...	...	89	...	41	21
Professional Colleges	...	...	...	83	...	16	1
High Schools	...	...	...	27	5	42	13
Middle Schools	...	...	...	40	25	25	10
Primary Schools	...	...	...	61	31	3	5
Special Schools	...	...	...	84	5	5	6
INSTITUTIONS FOR FEMALES.							
Arts Colleges	...	...	...	65	...	13	22
Professional Colleges	...	...	...	71	...	14	15
High Schools	...	...	...	49	7	31	14
Middle Schools	...	...	...	41	26	9	23
Primary Schools	...	...	...	39	45	1	15
Special Schools	...	...	...	62	2	7	29
Average	...	...	...	51	15	20	14

This shews that half the total Educational expenditure is provided by Government, about 20 per cent. from fees, and the rest is made up from District Board funds and other sources. The expenditure on the lower forms of education will always mainly fall on Government or local bodies, but with increasing financial stringency a larger proportion of income from fees in the higher forms of Education would seem to be indicated. Probably no other Government outside India contributes so large a proportion (38 per cent.) as the Government of the Punjab towards the maintenance of Arts Colleges.

68. The time of University Professors has perforce to be devoted to the instruction of young men, who under a better system would be trained in other institutions elsewhere. This leaves them little leisure for that higher study and research in the Arts and Sciences, which have rendered the Universities of England and Scotland well-springs of culture for the whole world. In spite of these difficulties valuable research work is being done in Economics and History. But the real cure of the evil will only be found when Intermediate Colleges in the districts will relieve the University of its pedagogic work and leave it free for higher activities. Unfortunately the establishment of these colleges has had to be postponed hitherto owing to financial stringency. These and other problems may, however, be left to the wisdom of the newly formed Academic Council of the University, which should enable the leading teachers of the University and its colleges to discuss urgent matters of educational reform. It will be necessary to frame degree courses for the requirements of those who desire to enter public life and service. A well devised course comprising such subjects as English literature, modern history, political science, administration and economics (with special relation to Indian problems) might be of great value to the political and administrative development of the Province. Amongst the students a much healthier spirit now prevails. Political excitement has waned, and attention is being devoted to athletics and such work as that of the Coats Off Society of the Khalsa College, which following tutorial example made much of the useless land belonging to the College ready for plough. By thus raising the dignity of manual occupations the gradu-

ate may be saved from that lassitude, which so often characterises him in after life. The work of standardisation of technical terms in Urdu and Punjabi is now nearly completed. Tentative lists of terms have been submitted to the scrutiny of linguistic experts. When finished they should render possible the issue of a series of translations of standard English works in science and literature. This should do much to introduce possibilities of wider culture to the minds of those who have only received vernacular education. Such translations are the more necessary in view of the dearth of indigenous books of real merit.

69. A valuable survey of secondary education was made during the year 1923. Every avenue of expenditure was scrutinized, buildings, staff, organisation, equipment, libraries, menials and contingencies revealing many directions in which retrenchment was not only possible but also necessary in order to prevent extravagance. As a result, while the number of scholars in 1922-23 increased by 19 per cent., as compared with the previous year, the cost of secondary education only increased by 8 per cent. The same principles of economy have also been insisted on in aided schools before grants-in-aid are awarded. Enquiries from other provinces have shewn that such grants have hitherto been made on a more liberal scale in the Punjab than most other provinces. The survey also brought to light several inequalities in the existing provision of facilities for secondary education in different parts of the Province. While the comparatively advanced and wealthy urban areas have a plethora of schools, the poorer and more backward rural areas are inadequately supplied. Thus the resources of Government have been consumed in the encouragement of the more fortunate to the exclusion of the really needy. In future the needs of the Province as a whole will be considered rather than those of the more vocal localities. Discipline is generally good in spite of the frequent transfers and removal of headmasters in aided schools. Athletic training is being broadened and is no longer confined to select teams of specialists. The Boy Scout movement is still in its infancy in the schools of the Province, but present indications shew that it will develop rapidly as trained Scout Masters become available. The troop at the Government High School, Simla, did yeoman service, last December, when the Grand Hotel was destroyed by fire, and one boy (as the headmaster reports) "at

classes that literacy is incompatible with the vocation of agriculture. In 1923 no less than 18,000 adults were enrolled in these schools. The cost was very little as normal and other schools were utilised by them after school hours. The education of adults involves interesting possibilities. When once the rudimentary ground-work has been covered, the teaching should be largely individual. General principles can be more widely inculcated, and it is to be hoped that with the installation of village libraries and suitable pamphlets concerning matters of common agricultural interest, vernacular education alone may suffice to raise the rural classes to a high standard of culture. Special classes are being held in some places for the training of demobilised soldiers ; and the recruitment of as many agriculturists as possible in the normal schools where teachers are trained should result in a teaching staff more sympathetic to agricultural needs.

74. Normal school buildings are now being utilised up to their full capacity, thus avoiding duplication of equipment ; and training class unit of forty pupils has been standardised. By these means it is now possible to train a large number of teachers at a very moderate expense. Inspection methods are being humanised by informal discussions of educational problems with teachers after school hours. In every way the Education Department is becoming an instrument for the moral and intellectual up-lift of the Province at the least possible expenditure consistent with efficiency.

75. At an annual cost of about Rs. 15,000 the Lahore Museum* plays a valuable part in the dissemination of culture. It shares with the Zoological Gardens the premier place in the affections of Lahore sightseers, and the number of visitors to it during the year 1922-23 was again over half a million. The zenana days were crowded as usual. The experiment of charging a four annas entrance fee from non-student visitors on the weekly students' day was tried in the latter half of the year. It produced the satisfactory sum of Rs. 831, and no inconvenience was reported to have been caused to the students. It was unfortunate that the financial position again restricted expenditure on the purchase and preservation of exhibits, and that not more than Rs. 2,881 was available for this purpose. It was, however, sufficient for

*See 1921-22 Report, I, 477, 478.

the purchase of some interesting Tibetan curiosities and old Indian and Persian pictures, together with three silver Kashmir necklaces and representative specimens of Burmese lacquer and basket work. A specially valuable acquisition was a collection of notes and memoranda left by the famous numismatist, Mr. Rodgers, whose fine collection of coins already adorns the Museum. Mr. A. K. Muirhead of the North-Western Railway presented a brick from Ur of the Chaldees with an Assyrian inscription dating from B. C. 2220, several centuries before Abraham left that city on his long tour. But the Lahore Museum fulfils the functions of the Royal Academy as well as those of the British Museum. The Punjab Fine Art Society has been founded to stimulate artistic production and criticism. It held its inaugural exhibition in the large empty gallery of the Lahore Museum in February 1923. Sales were good, the standard of artistic merit was high and the exhibits of Indian Artists were prominent both in quantity and quality.

CHAPTER VII.

FINANCE.

It is a very good world to live in,
To lend, or to spend, or to give in ;
But to beg or to borrow, or to get a man's own ;
It is the very worst world that ever was known.

EARL OF ROCHESTER.

76. The importance of the financial side of adminis-
Finance under the Reforms. Abolition of Divided Heads.
tration is often apt to be overlooked. Finance is indeed but a means to an end—good Government. But it is a most essential means. Financial independence is one of the first privileges of self-government, and the Punjab, like other Indian provinces, is now facing the responsibilities which accompany all privileges. This is the final outcome of a gradual process by which the extreme financial centralisation which the Government of India inherited from the commercial methods of the East India Company has disappeared. All revenues originally went into the coffers of the Central Government, and all but the most trifling expenditure had to be defrayed under its orders. From that primitive condition evolved the system of 'divided heads' which attempted to secure for the Government of India an adequate revenue from sources of income under Provincial control without depriving the provinces of the stimulus to careful management which a share in the proceeds would afford. With the advent of the Reform Scheme all heads which had previously been divided between the Provincial and Central Governments were allocated to the former with the exception of Income Tax which was credited to the Imperial Revenues.*

77. Under this rearrangement, however, the Govern-
The Provincial contribution.
ment of India would lose heavily. It was therefore necessary to get contributions from the provinces ; and here the difficulties began. Finally it was arranged that the ultimate contributions from the provinces should be roughly in proportion to their wealth, and so while Bengal paid 19 per cent. of the total provincial contributions, the Punjab was only liable for 9 per cent. But in view of the difficulty to a Province like Bengal, of immediately adjusting her finances, this scale

*See 1921-22 Report, I, 112-122.

was only made an ultimate goal, the immediate charges being proportioned to the estimated relative burdens under the old system. Thus while the Punjab is now charged Rs. 175 lakhs, Bengal was only assessed at Rs. 69 lakhs and even this sum was remitted for three years.

78. These contributions are felt by the provinces to be a burden, and feeling on the subject is not likely to diminish. Military expenditure, which is the chief Imperial charge, is not likely to expand considerably, while the provinces will require continually increasing funds for the development of Education, Communications, Public Health, Agriculture and other beneficent activities. *Per contra* two Imperial Receipts under Customs and Income Tax are capable of indefinite expansion, while Provincial Receipts such as Land Revenue and Excise, under a temperance policy, are inelastic. Thus the Government of India has an expanding revenue with a stationary expenditure and the Provinces the opposite. It was hoped that the revenues of the provinces, increased as a result of the financial settlement under the Reforms, would assist them in finding the money for large schemes of economic and social development. But this hope is not likely to be realized, unless some steps are taken to enable the provinces to participate in the increased income which the Government of India will appropriate from the increased wealth which will result from such development.

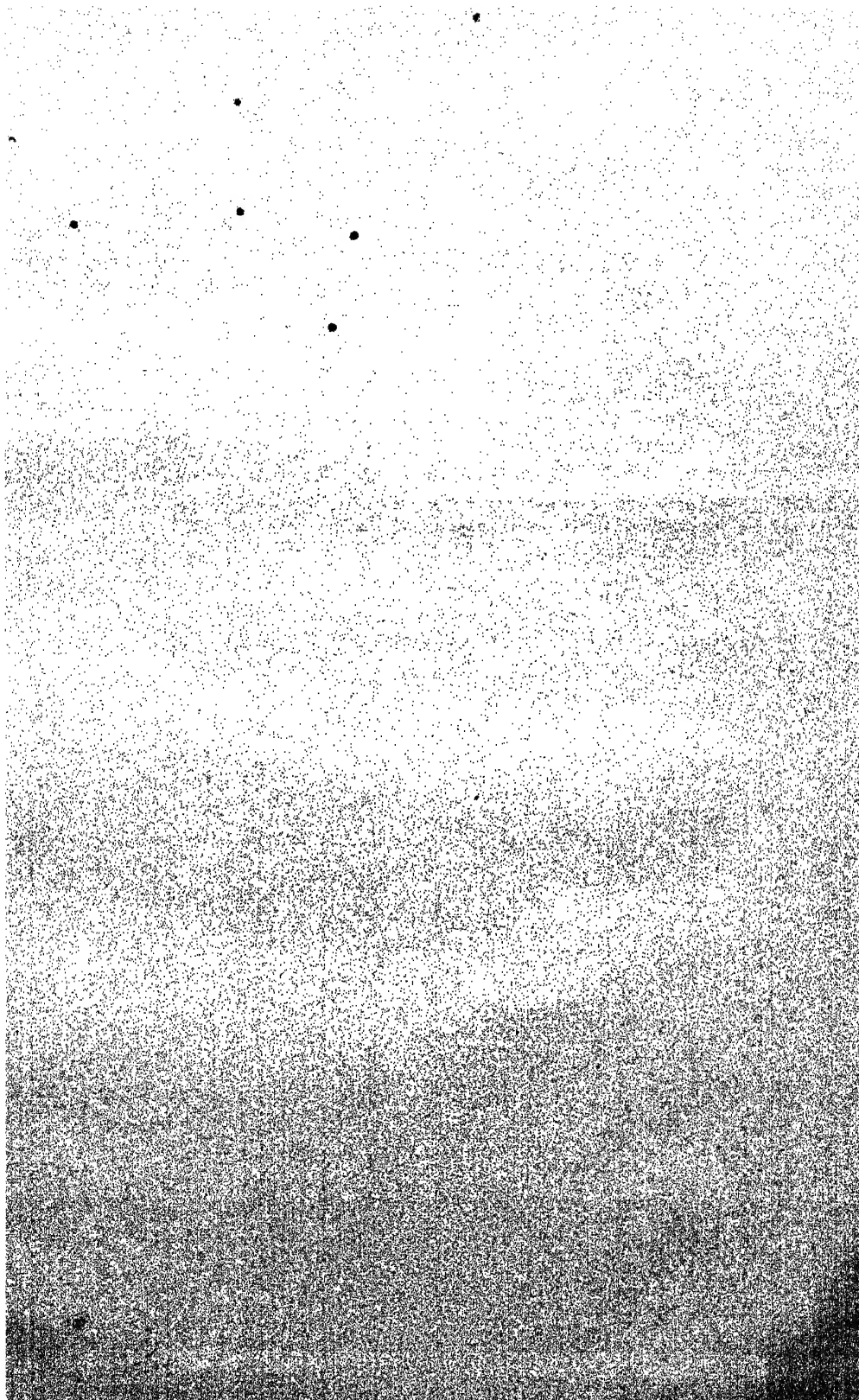
79. But whatever may be its effect on provinces containing large commercial centres, a predominantly agricultural province such as the Punjab is for the time being a gainer under the new system. Other things being equal the Punjab would have launched the new regime with a cash balance of Rs. 140 lakhs in hand, and a net annual further gain of Rs. 59 lakhs.* Actually, however, it ended the first financial year after the introduction of the Reforms (1921-22) with a deficit of Rs. 205 lakhs, of which Rs. 140 lakhs were met from the balance and the remaining Rs. 65 lakhs from an advance from the Government of India. Briefly the reasons for this may be given as a heavy increase in expenditure due to the rise in prices combined with an inelastic revenue.

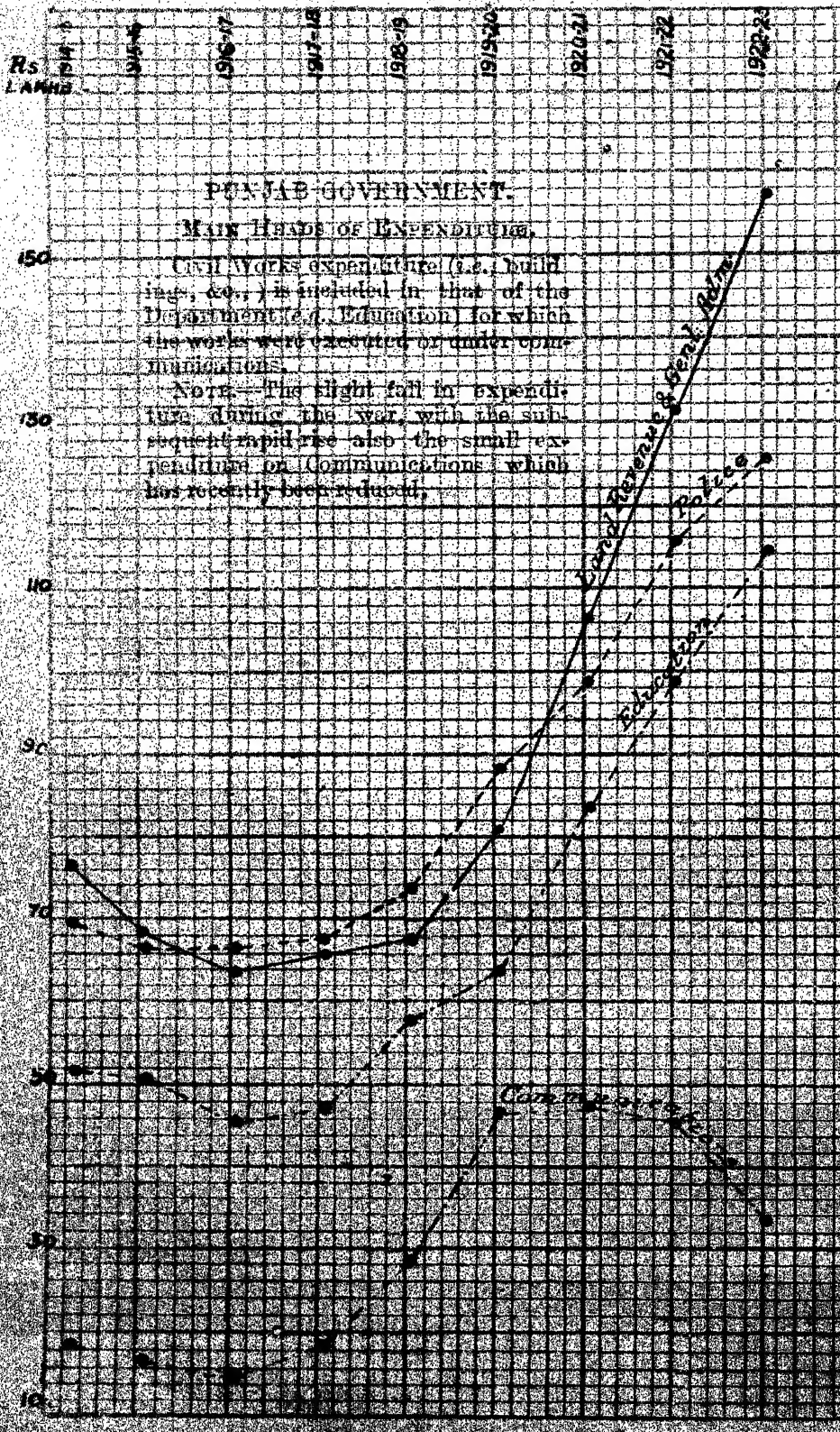
*See 1921-22 Report, I, 123.

80. The accompanying statements shew the income and expenditure for the years 1921-22 and 1922-23 during which the Reform Scheme has been working :—

Punjab Government Receipts (Rupees in lakhs).

	1921-22.	1922-23.
REVENUE RECEIPTS.		
Land Revenue (excluding sale of Government land):	2,20	2,00
Excise	1,16	1,03
Stamps	82	89
Forest	60	34
Irrigation (working expenses deducted) ...	3,33	3,64
Education	7	9
Other beneficent departments	10	8
Other heads	59	68
Total Revenue income ...	8,77	9,74
Revenue deficit ...	2,05	87
Total	10,82	10,61
CAPITAL RECEIPTS		
Sales of Government lands	38	30
Other receipts	14	46
Total Capital receipts ...	47	76
Capital deficit	88	41
Total	1,35	1,17





Punjab Government Expenditure (Rupees in lakhs).

	1921-22.			1922-23.		
	Ordinary.	Civil Works.	Total.	Ordinary.	Civil Works.	Total.
EXPENDITURE CHARGED TO REVENUE.						
Contribution to Government of India.	2,01	...	2,01	1,75	...	1,75
Land Revenue and General Administration.	2,31	15	2,46	2,39	16	2,55
Forests ...	44	...	44	44	...	44
Irrigation (interest on debt) ...	75	...	75	75	...	75
Irrigation (miscellaneous expenditure).	18	...	18	18	...	18
Police ...	1,12	3	1,15	1,23	2	1,25
Education ...	88	10	98	1,00	14	1,14
Other beneficent Departments	82	8	90	80	8	88
Communications ...	...	45	45	...	88	88
Other heads ...	1,06	44	1,50	99	38	1,37
Total Revenue expenditure ...	9,57	1,25	10,82	9,55	1,00	10,61
CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.						
Irrigation ...	19	...	19	94	...	94
Other items ...	1,16	...	1,16	25	...	25
Total Capital expenditure...	...	...	1,35	...	...	1,17

81. The most important new departure in budget procedure is the definite separation of capital receipts and expenditure from revenue receipts and expenditure. Previous to the Reforms, the expenditure on canal construction and loans to local bodies or agriculturists were, it is true, reckoned as capital expenditure. Loans for these purposes were advanced by the Government of India to the Province. But the receipts from sale-proceeds of waste lands and Government estates were previously credited to the head Land Revenue and the sale of town sites belonging to Government to the head Miscellaneous. These are now recognised to be of a capital nature and the Budget form has been amended accordingly. They are almost entirely receipts on account of land made available for cultivation

in the Canal Colonies and from the sale-proceeds of town sites, due to the creation of new towns in the colony areas. These receipts totalled no less than Rs. 170 lakhs in eight years,* and this enabled the Province to accumulate the balance of Rs. 140 lakhs with which the Reform period commenced. It is also recognised that expenditure on Forests, Industries and Civil Works, which is directly remunerative, is of a capital nature, and only the interest on such expenditure and not the total amount should be debited to revenue expenditure under those heads. So far, however, it has not been found possible to adopt this procedure for these other departments. The large capital expenditure of Rs. 116 lakhs in 1921-22 under Other Items was due to the necessity for making large *takavi* advances to agriculturists for seed and other purposes in view of the previous succession of bad harvests. The increase from Rs. 14 to 46 lakhs under Other Receipts in 1922-23 marks the first instalment of the repayment of these advances. The large expenditure of Rs. 92 lakhs under Irrigation was mainly spent on the new Sutlej Valley Project.†

82. The net capital deficit in 1921-22 amounted to Rs. 88 lakhs, of which Rs. 35 lakhs were met by loans from the Government of India and the remaining Rs. 53 lakhs by withholding the payment due to the Government of India on account of the balance of the Provincial Loan Account. The capital deficit in 1922-23 was met by a further loan of Rs. 41 lakhs from the Government of India. But the Government of India will be unable permanently to finance the Province by loans. It will be necessary for the Province itself to raise money on its own credit, and as a step towards this the Punjab Government has itself issued a loan at 6½ per cent. of which Rs. 192 lakhs were taken up. This will help to cover not only the commitments on capital account, but also the money due on the recurring deficits on revenue account.

83. Capital expenditure of this type, so far from being a drain on the resources of the Province, is directly remunerative. Irrigation capital expenditure, for example, after paying all interest

*In the years 1914-15 to 1921-22.

Receipts from sale of government estates amounted to Rs. 32 lakhs.

Sale of waste land Rs. 104 lakhs.

Sale-proceeds of town sites, Rs. 34 lakhs.

The year 1921-22 is post-Reform, but receipts from years previous to 1914-15 would more than counterbalance this.

†See also paragraph 197.

and other charges affords a large net profit to the revenues of the Province. But the deficits on revenue account are in quite another category. The total deficit in these two Reform years amounts to Rs. 292 lakhs and a further deficit of Rs. 63 lakhs has been budgetted for in 1923-24, making a total of Rs. 355 lakhs, so that the last three years have saddled the Province with an interest charge of Rs. 7 lakhs and a sinking fund of Rs. 25 lakhs or a total Debt Service of Rs. 32 lakhs, for which the Province has nothing to shew at all.

84. The present financial deficit, though it has been intensified by certain large items of expenditure passed by the Council and by the Council's refusal to agree to new taxation, has its main origin in items of expenditure and financial arrangements determined on before the introduction of the Reforms, including the large increase necessitated in the pay of establishments by the rise in prices. This has swallowed up the anticipated increase in revenue, an increase which was not actually realised. The actual increase of expenditure due to the introduction of the Reforms themselves only amounted to about Rs. 5½ lakhs annually.

85. The first charge on the expenditure of the Province is its permanent contribution of Rs. 175 lakhs to the Government of India (*para. 77*). In 1921-22 an additional sum of Rs. 26 lakhs was taken by the Government of India as a compensation for the share of income-tax granted to the Punjab Government. In order to give them some sympathy with the efforts of the Imperial Income-tax Department, the provinces are granted 3 pies on each rupee of increase in assessed income over the amount assessed in 1920-21. The Punjab receipts under this head amounted to Rs. 5½ lakhs in 1922-23.

86. It is now generally recognised that expenditure on Civil Works executed by the Public Works Department (Buildings and Roads Branch) for various departments ought to be included in the expenditure under those departments. It is only in this way that it is possible to compare the expenditure on these departments and that on Communications accurately. It should be remembered, however, that those sums which are shown in the Receipts and Expendi-

ture statement as paid for Civil Works executed for various departments only include the actual cost paid to contractors for the work done and do not include the overhead charges of the Public Works Department itself which maintains a large staff for the superintendence of such work.

87. All the ordinary cost of administration is included in expenditure under the heads Land Revenue and General Administration, and Police.* Prices have risen, and the pay of the higher Indian officials (Tahsildars are a notable exception) has risen more than proportionately, with a consequent rise in the cost of administration. Expenditure on Education has again risen from Rs. 98 in 1921-22 to Rs. 114 lakhs in 1922-23 and that on Industries from Rs. 6½ to 8½ lakhs, but expenditure on all other beneficent departments† has fallen. The expenditure under the head Agriculture amounted to Rs. 30 lakhs in 1922-23. This included Rs. 15½ lakhs on the Agricultural Department, Rs. 9½ lakhs on the Veterinary Department‡ and only Rs. 4½ lakhs on the Co-operative Department, which, with an unlimited field for expansion, has more than any other felt the effects of the present financial stringency.

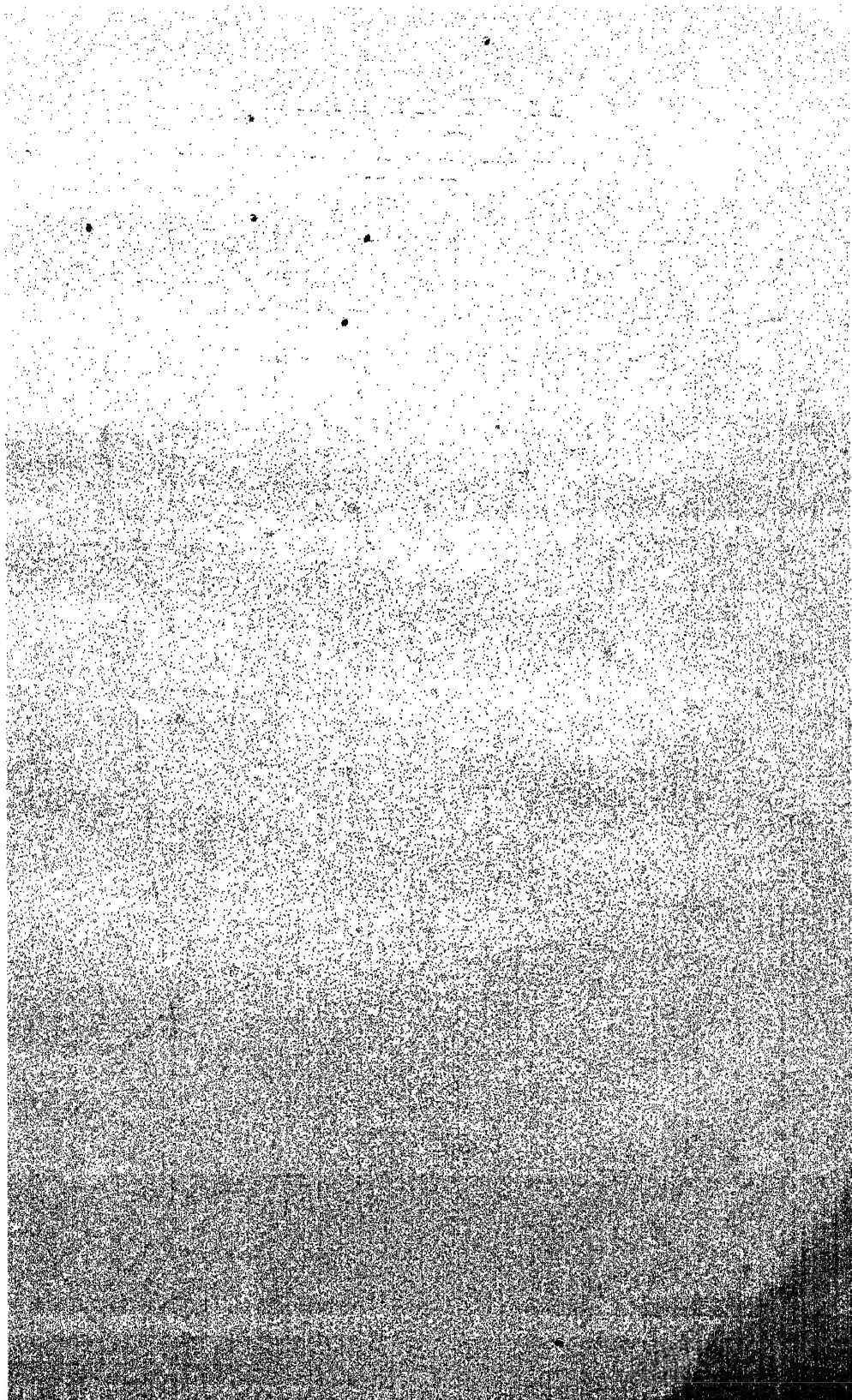
88. The decline in expenditure on Communications is perhaps even more vital to the development of the Province. Though not directly remunerative, roads are necessary to agriculture and commerce and thus increase the wealth and taxable capacity of the people. In England a quarter of the £40 millions spent annually on roads is raised by motor taxation. When it is realised that the Punjab with twice the area and more than half the population of England only spends one-hundredth of this amount (Rs. 33 lakhs from the Provincial Government and Rs. 24 lakhs from local bodies) the inadequacy of its communications will be appreciated. Most of this meagre allotment goes on repairs. There has been hardly any new construction. Less than Rs. 2 lakhs was spent on new construction this year as against Rs. 24 lakhs in 1919-20, Rs. 19½ lakhs in 1920-21 and Rs. 8 lakhs in 1921-22. It is particularly unfortunate that since the

Unimproved expenditure on Communications.

* See graph.

† The so-called beneficent departments are those whose beneficence is more in the public eye, than that of those connected with Law and Order. They are generally transferred departments.

‡ In paragraph 151 it is stated that the Provincial expenditure on the Veterinary Department is Rs. 4 lakhs. This does not include Rs. 1½ lakhs non-voted expenditure on the higher official staff.



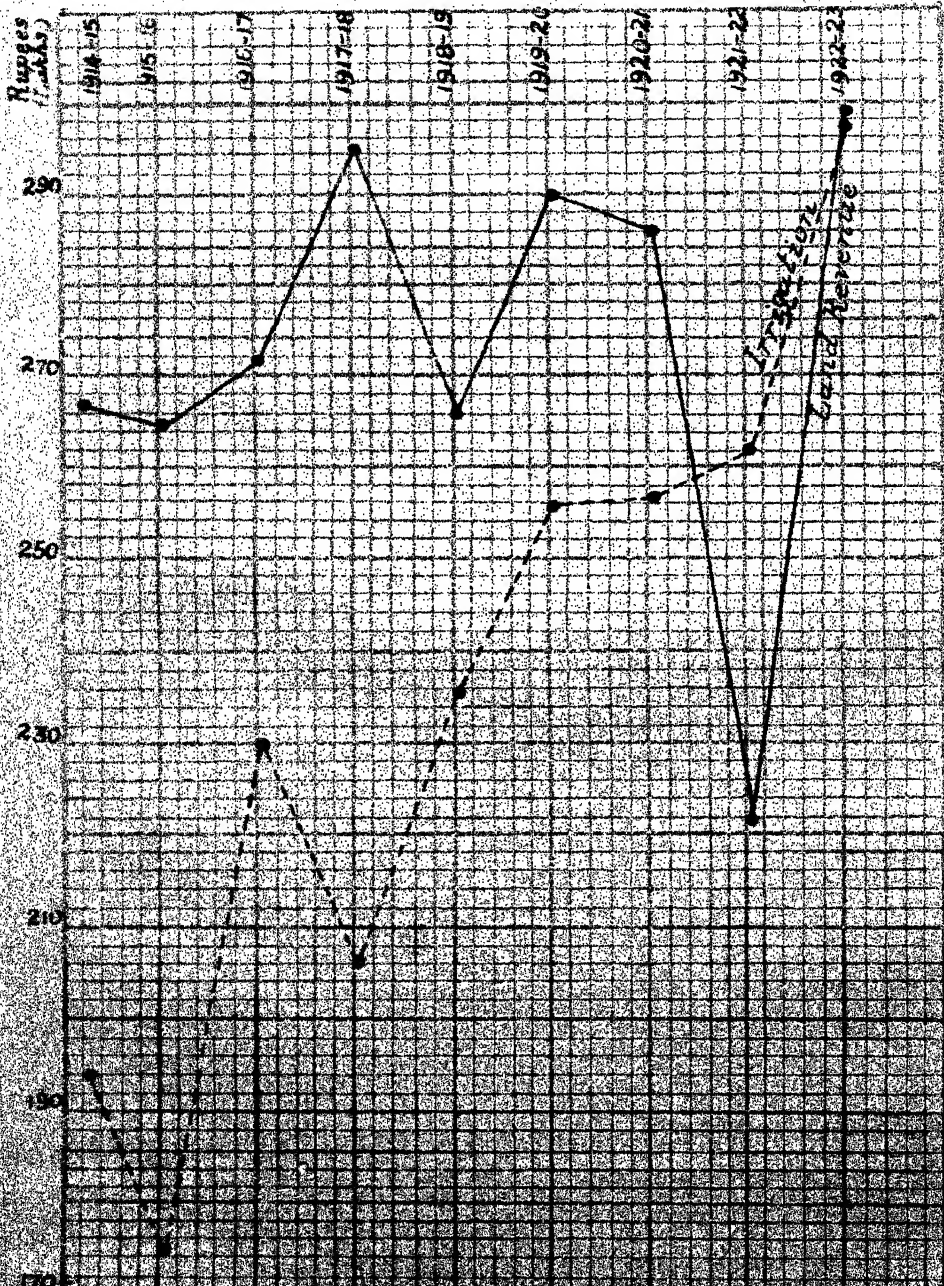
PUNJAB GOVERNMENT.

IRRIGATION AND LAND REVENUE RECEIPTS.

Sales of land are excluded from land revenue receipts.

Land revenue, generally stationary, fell heavily in 1921-22 owing to bad harvests.

Irrigation receipts show a steady rise. These are net receipts after deduction of working expenses and interest.



creation of the Communications Board* that body has had very little money to spend on the imposing schemes to which it has devoted so much time and consideration.

89. The main Heads of Revenue Receipts are Land Revenue Receipts: Revenue and Irrigation. As has already been explained (*para.* 51) receipts from sales of waste lands and Government estates which were formerly included under the head Land Revenue, have been excluded in the statements. It will be seen from the graph that Land Revenue fluctuates violently round a norm of about Rs. 273 ; which has hardly increased at all and certainly not in proportion to the rise in prices and increase in the wealth of the Province. In 1921-22 bad harvests necessitated large remissions and suspensions of land revenue, while in 1922-23 owing to good harvests and recovery of some of the land revenue suspended the receipts reached a maximum. These violent fluctuations are disturbing to Provincial finance and to guard against them some form of insurance on the line of famine insurance seems advisable.

90. The following statement shews clearly how much the Provincial Receipts owe to the Irrigation Department :—

Irrigation, Income and Expenditure.

				INCOME.			EXPENDITURE.		
				Direct.	Indirect.	Total.	Working expenditure.	Interest.	Net profit.
1914-15	...	...	...	255	112	367	103	71	193
1915-16	...	...	...	247	118	365	119	72	174
1916-17	...	...	...	287	130	417	118	70	229
1917-18	...	...	...	282	118	400	120	75	205
1918-19	...	...	...	285	145	431	120	76	235
1919-20	...	...	...	331	134	465	135	75	255
1920-21	...	...	...	340	143	483	154	73	256
1921-22	...	...	...	332	187	519	184	74	261
1922-23	...	...	...	370	181	551	180	75	296

Direct receipts are composed of water rates levied directly on canal-irrigated land. Indirect receipts consist

*See 1921-22 Report, I, 285 foll.

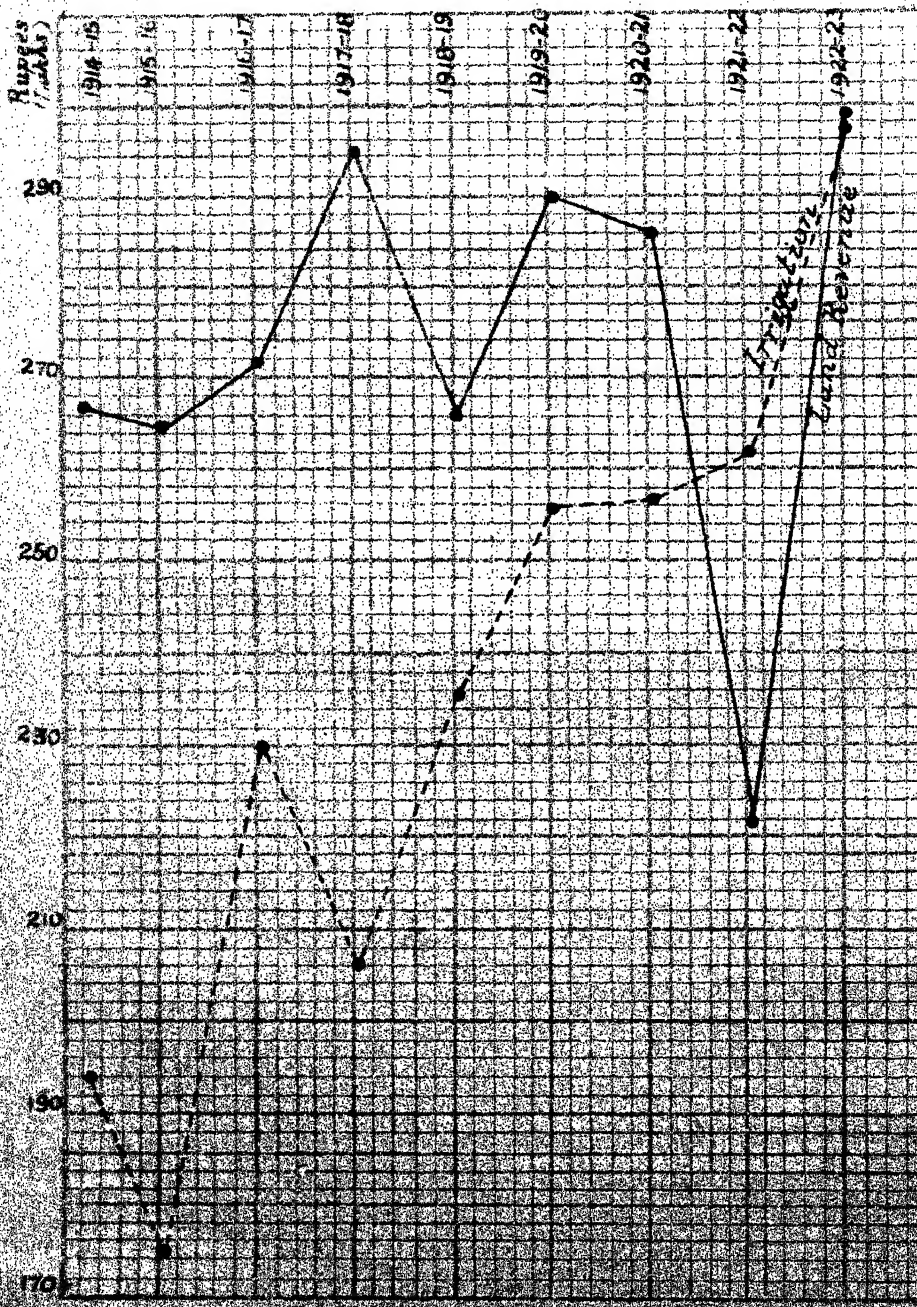
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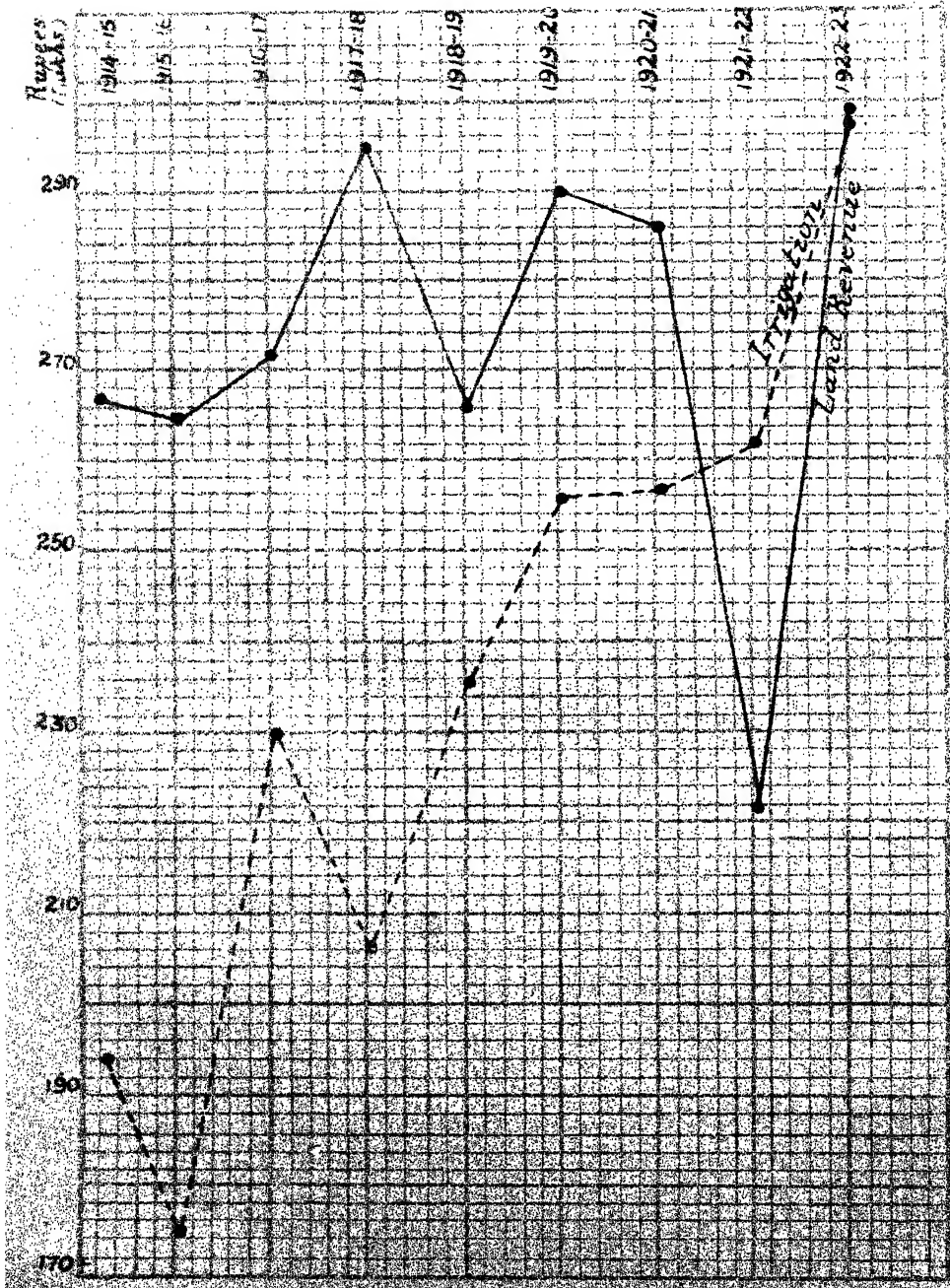
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creation of the Communications Board* that body has had very little money to spend on the imposing schemes to which it has devoted so much time and consideration.

89. The main Heads of Revenue Receipts are Land Revenue Receipts: Revenue and Irrigation. As has already been explained (ante, §1) receipts from sales of waste lands and Government estates which were formerly included under the head Land Revenue, have been excluded in the statements. It will be seen from the graph that Land Revenue fluctuates violently round a norm of about Rs. 273 ; which has hardly increased at all and certainly not in proportion to the rise in prices and increase in the wealth of the Province. In 1921-22 bad harvests necessitated large remissions and suspensions of land revenue, while in 1922-23 owing to good harvests and recovery of some of the land revenue suspended the receipts reached a maximum. These violent fluctuations are disturbing to Provincial finance and to guard against them some form of insurance on the line of famine insurance seems advisable.

90. The following statement shows clearly how much the Provincial Receipts owe to the Irrigation Department:—

Irrigation, Income and Expenditure.

				INCOME.			EXPENDITURE.		
				Direct.	Indirect.	Total.	Working expenditure.	Interest.	Not profit.
1914-15	...	...	...	255	112	367	103	71	193
1915-16	...	...	...	247	113	365	119	72	174
1916-17	...	...	...	287	130	417	118	70	229
1917-18	...	...	...	282	118	400	120	75	205
1918-19	...	...	...	285	146	431	126	72	235
1919-20	...	...	...	321	134	465	135	75	255
1920-21	...	...	...	340	143	483	154	73	256
1921-22	...	...	...	332	187	519	184	74	261
1922-23	...	...	...	370	181	551	160	75	296

Direct receipts are composed of water rates levied directly on canal-irrigated land. Indirect receipts consist

*See 1921-22 Report, I, 286 foll.

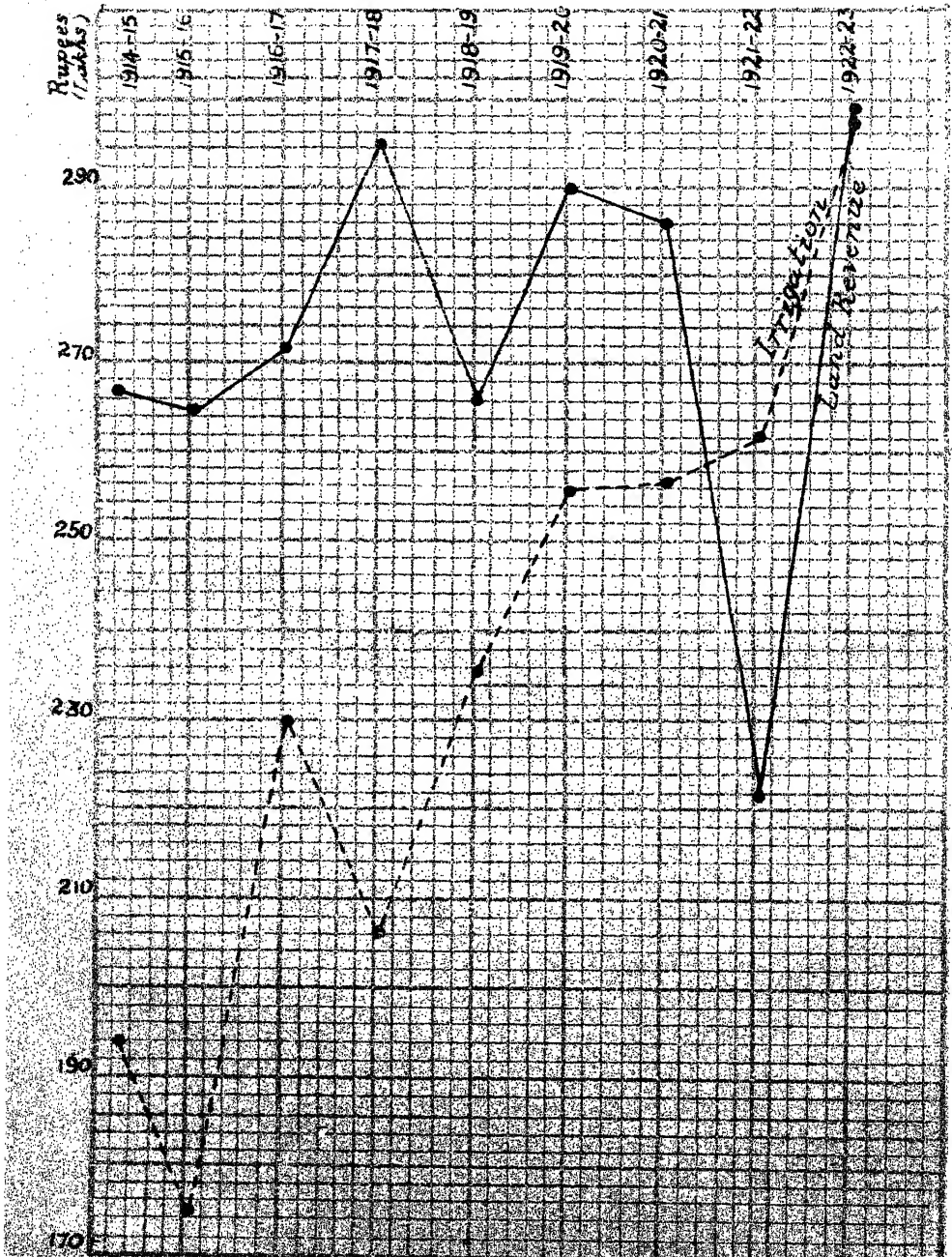
PUNJAB GOVERNMENT.

IRRIGATION AND LAND REVENUE RECEIPTS.

Sales of land are excluded from land revenue receipts.

Land revenue, generally stationary, fell heavily in 1921-22 owing to bad harvests.

Irrigation receipts show a steady rise. These are net receipts after deduction of working expenses and interest.



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Irrigation, Income and Expenditure.

				INCOME.			EXPENDITURE.			
				Direct.	Indirect.	Total.	Working expenditure.	Interest.	Total.	Net profit.
1914-15	...	...	...	255	112	367	103	71	174	193
1915-16	...	...	...	247	118	365	119	72	191	174
1916-17	...	...	...	267	130	417	118	70	188	229
1917-18	...	...	...	282	118	400	120	75	195	205
1918-19	...	...	...	285	146	431	120	76	196	235
1919-20	...	...	...	331	134	465	135	75	210	255
1920-21	...	...	...	349	143	493	154	73	227	266
1921-22	...	...	...	332	187	519	184	74	258	261
1922-23	...	...	...	370	181	551	180	75	255	296

Direct receipts are composed of water rates levied directly on canal-irrigated land. Indirect receipts consist

*See 1921-22 Report, I, 233 foll.

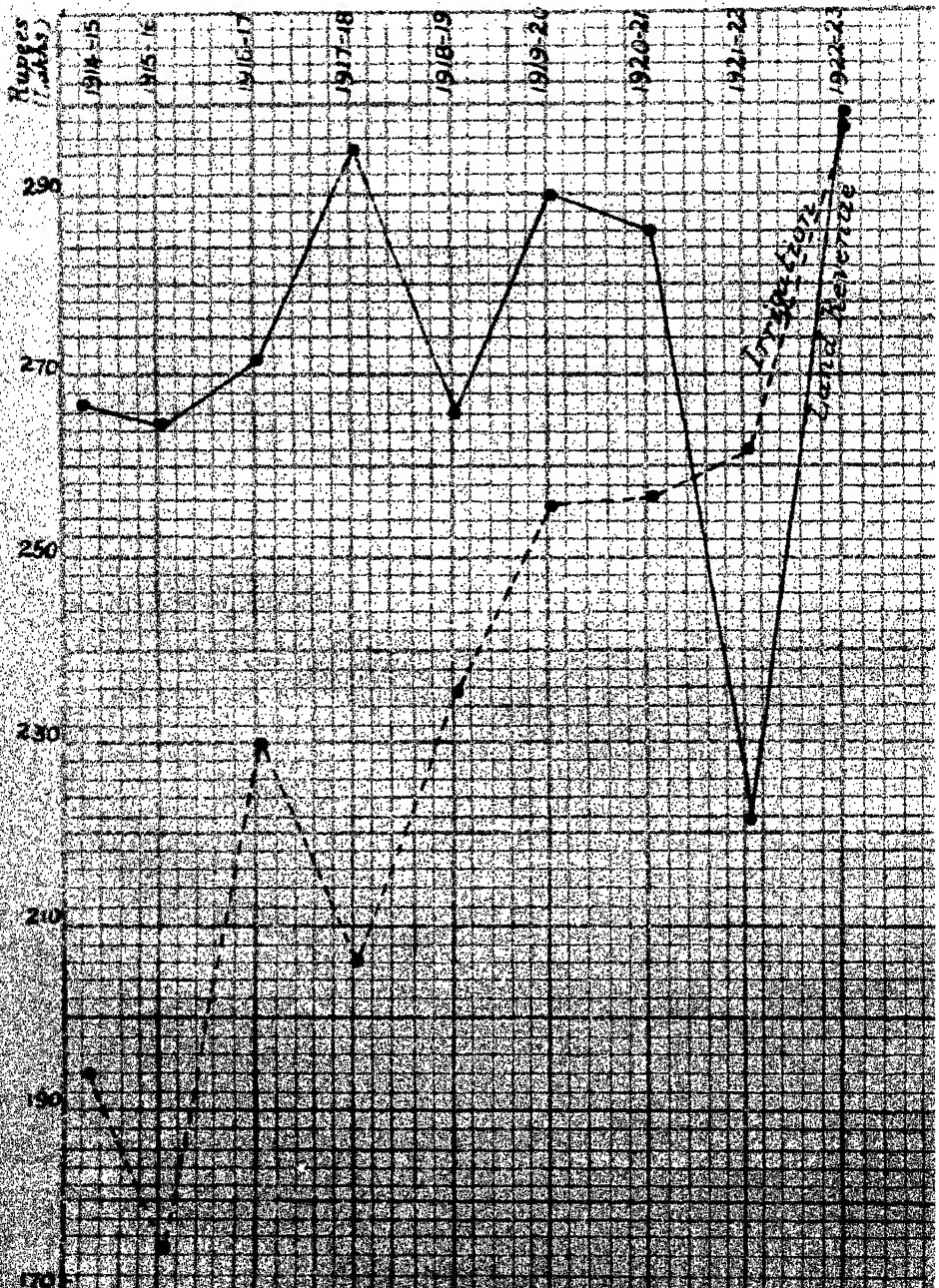
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Irrigation, Income and Expenditure.

	INCOME.			EXPENDITURE.			
	Direct.	Indirect.	Total.	Working expenditure.	Interest.	Total.	Net profit.
1914-15	255	112	367	103	71	174	193
1915-16	247	118	365	119	72	191	174
1916-17	287	130	417	118	50	168	229
1917-18	282	118	400	120	75	195	205
1918-19	285	148	431	120	76	196	235
1919-20	331	124	455	135	75	210	255
1920-21	349	143	493	154	73	227	256
1921-22	332	187	519	184	74	258	261
1922-23	870	181	551	180	75	255	296

Direct receipts are composed of water rates levied directly on canal-irrigated land. Indirect receipts consist

*See 1921-22 Report, I, 286 foll.

of the estimated extra land revenue resulting from canal irrigation, after deducting the additional expenditure of administration. It is collected by the land-revenue authorities and transferred to the Irrigation Department by bank-credit. After deducting working expenses and interest on the capital cost a large profit remains. This of course leaves out of count the other revenue that Government derives from the Canal Colonies, all ultimately due to the Irrigation Department.

91. The financial changes made under the Reform Scheme have necessitated a revision of ^{New Budgeting procedure.} budget procedure. The Government of India Act* requires that the estimated expenditure and revenue of the Province should be laid in the form of a statement before the Council in each year, and the proposals of the Local Government for the appropriation of provincial revenues and other moneys in any year shall be submitted to the vote of the Council in the form of demands for grants. This statement is called the Budget and is presented to the Council every March. It is based on a main division of expenditure into major heads, such as Education and Agriculture, which are again divided into minor heads, such as Primary Education and Co-operative Credit which are themselves divided into primary units of appropriation, such as Pay of Officers, Pay of Establishment, Travelling Allowance and Contingencies.

92. All expenditure must be one of eight kinds according to the following sub-divisions :—It must ^{Classification of expenditure.} be either voted or non-voted ; reserved or transferred ; and capital or revenue. Non-voted expenditure consists of contributions payable to the Government of India, interest and sinking fund insured on loans, expenditure of which the amount is prescribed by any law, and salaries of the Imperial Services and judges of the High Court. These are not in the power of the Council to withhold. From the Budget point of view reserved items of expenditure are distinguished as those which when struck off by the Council may be restored by the Governor. The distinction between capital and revenue expenditure, though of fundamental importance, has never been clearly defined. Certain major heads of account are now classified as capital heads, and the convention is es-

*Section 72 D.

tablished that no expenditure is debited to these heads unless it is directly remunerative. The interest on the most important capital head, that is, of canal construction, is debited to revenue expenditure under Irrigation, and in course of time a similar procedure will, it is hoped, be adopted with regard to the interest on capital expenditure under Forests, Industries and Civil Works.†

93. In estimating the ordinary expenditure for the new year it is important to have an accurate estimate of the expenditure to the end of the current year. This is greatly facilitated by the new Statement of Excesses and Surrenders which explains to what extent supply voted will be too little or too much for the expenditure of the year. This statement also enables an excess under any major head to be set off against savings elsewhere, in pursuance of the great principle that unanticipated expenditure should be met by savings in other directions. It also enables the revised estimate of expenditure to be prepared, which under the new system now introduced is based on this statement as the most accurate means of foretelling expenditure. It also enables lapses to be carried over to next year's Budget. In the past a great defect of the Budget system has been that the fear of losing grants irrevocably has led to reckless spending in the last month of the year. Under the new system lapses reported under most primary units will be made good in the next year's Budget, provided that there is no excess over the major head, and provided that the accounts bear out the estimate. Conversely, excesses under a major head may be penalised by deductions from next year's provision. It is now to the interest of officers to underspend rather than to over-spend as if lapses are reported in time (and the last date is February 1st) they will be restored and can be spent at leisure next year.

94. In theory any new expenditure, anything that is over and above what is provided in the Budget for the current year, should be excluded from the estimates of ordinary expenditure and brought before the Standing Finance Committee (*para. 24*) in the Schedule of New Expenditure or the lists of major and minor works. But practical considerations modify the application of this principle, and

The Statement of
Excesses and Surrenders.

New expenditure
and Civil Works.

† See also paragraph 81.

of the estimated extra land revenue resulting from canal irrigation, after deducting the additional expenditure of administration. It is collected by the land-revenue authorities and transferred to the Irrigation Department by book-credit. After deducting working expenses and interest on the capital cost a large profit remains. This of course leaves out of count the other revenue that Government derives from the Canal Colonies, all ultimately due to the Irrigation Department.

91. The financial changes made under the Reform New Budgeting Scheme have necessitated a revision of procedure. The Government of India Act* requires that the estimated expenditure and revenue of the Province should be laid in the form of a statement before the Council in each year, and the proposals of the Local Government for the appropriation of provincial revenues and other moneys in any year shall be submitted to the vote of the Council in the form of demands for grants. This statement is called the Budget and is presented to the Council every March. It is based on a main division of expenditure into major heads, such as Education and Agriculture, which are again divided into minor heads, such as Primary Education and Co-operative Credit which are themselves divided into primary units of appropriation, such as Pay of Officers, Pay of Establishment, Travelling Allowance and Contingencies.

92. All expenditure must be one of eight kinds according to the following sub-divisions:—(1) Revenue expenditure, (2) Capital expenditure, (3) Expenditure transferred, and (4) Expenditure on the Government of India. Revenue expenditure consists of contributions payable to the Government of India, interest and sinking fund incurred on loans, expenditure of which the amount is prescribed by any law, and salaries of the Imperial Services and judges of the High Court. These are not in the power of the Council to increase. From the Budget point of view revenue expenditure is divided into three parts:—(a) Expenditure on the Government of India, (b) Expenditure on the Provincial Government, and (c) Expenditure on the Provincial Government transferred from the Government of India.

established that no expenditure is debited to these heads unless it is directly remunerative. The interest on the most important capital head, that is, of canal construction, is debited to revenue expenditure under Irrigation, and in course of time a similar procedure will, it is hoped, be adopted with regard to the interest on capital expenditure under Forests, Industries and Civil Works.†

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of the Government of India and revenue resulting from canal irrigation, and meeting the additional expenditure of administrative expenses connected with the land-revenue authorities, are placed at the disposal of the Department by the Government of India. The Department has to meet its administrative expenses and interest on its loans out of the proceeds of the land-revenue. This of course is not the only other revenue that Government of India and the Colonies all ultimately due to the Government of India.

91. The financial changes made under the Reform Bill have necessitated a revision of the financial procedure. The Government of India has required that the estimated expenditure and revenue of the Province should be laid in the form of a statement before the Council in each year, and the proposals of the Local Government for the appropriation of provincial revenues and other moneys in any year shall be submitted to the Council in the form of demands for grants. This statement is called the Budget and is presented to the Council every March. It is based on a main division of expenditure into major heads, such as Education and Agriculture which are again divided into minor heads, such as Primary Education and Co-operative Credit which are themselves divided into primary units of appropriation, such as Pay of Officers, Pay of Establishment, Travelling Allowance and Contingencies.

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established that no expenditure is debited to these heads unless it is directly remunerative. The interest on the most important capital head, that is, of canal construction, is debited to revenue expenditure and irrigation, and in course of time a similar procedure will, it is hoped, be adopted with regard to the expenditure on capital expenditure under Forests, Industries and Civil Works.

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94. In theory any new expenditure, anything that is over and above what is provided in the Budget for the current year, should be excluded from the estimates of ordinary expenditure and brought before the Standing Finance Committee (*para.* 24) in the Schedule of New Expenditure or the lists of major and minor works. But practical considerations modify the application of this principle, and

† See also paragraph 81.

it is only between December 1st and April 1st that the power to sanction expenditure which affects the next year's budget is in abeyance. The Schedule of New Expenditure includes all new schemes which it is proposed to introduce with effect from April 1st, and all expenditure which has been sanctioned for disbursement to the end of the current year only and which it is proposed to continue, as well as any expenditure over the current year's allotment under Contract Contingencies, Supplies and Services, Grants-in-aid, Contributions and Donations. It rests with the Heads of Departments to persuade the Finance Department and Standing Finance Committee as to the importance of the projects for new expenditure or Civil Works, which they put forward. Separate estimates are made for expenditure in England, which is mainly incurred by the High Commissioner for stores or on account of the pay of officers on leave or deputation.

95. Members and Ministers are associated in the scrutiny of the Schedule of New Expenditure and the lists of Civil Works, as these lists come from the Secretaries in the Administrative Departments. The remainder of the Budget is in its earlier stages a matter of routine and is taken direct from the Heads of Departments. After demands for voted expenditure are passed by the Council they and the non-voted expenditure under each head have to be communicated through Heads of Departments to the Disbursing Officers, *e.g.*, Deputy Commissioners. As a matter of administrative expediency Ministers and Members have a statutory right of reappropriation within a minor head, that is, of diverting supply voted or assigned to one minor head, from that minor head to another. But the apparently wide powers of the Member or Minister are limited by the obligation, first, not to commit the Council to expenditure in ensuing years, and, secondly, not to go beyond or defeat the intentions of the Council in voting the grant. These powers are generally delegated by Members and Ministers to Heads of Departments. In the case of Civil Works powers of reappropriation are granted to the Public Works Department and not to the departments concerned. For if the work of Government as a whole is to be carried on in an economical manner the Public Works Department must be able to use anticipated savings on one work to meet excesses on another. The department in whose

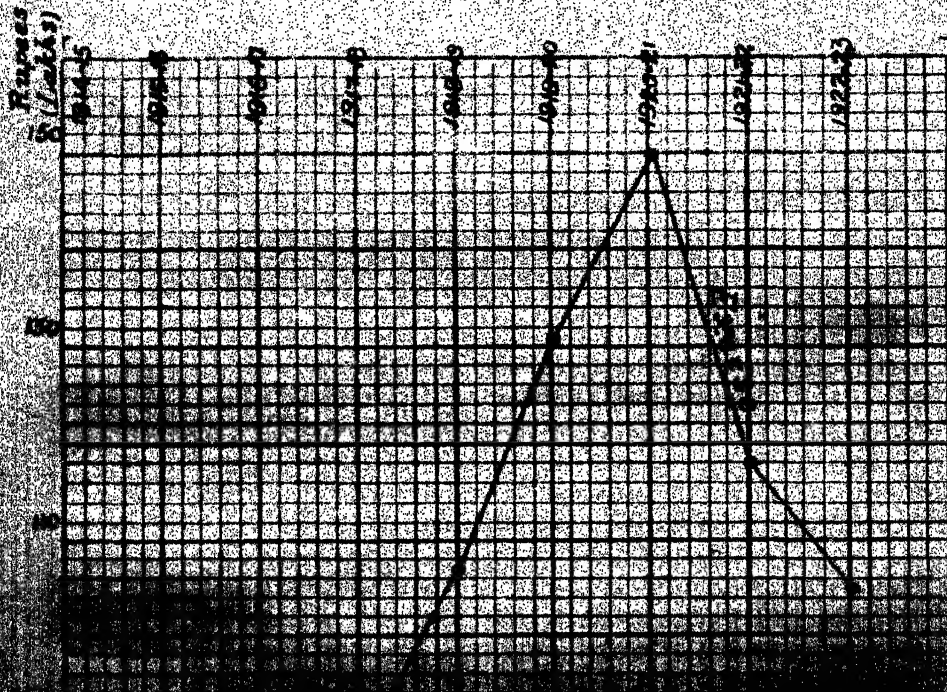
Powers of reappropriation delegated to Heads of Departments.



PUNJAB GOVERNMENT. **EXCISE AND STAMP REVENUE.**

NOTE 1.—The rapid rise in excise revenue with the growing wealth of the Province and the increased efficiency of the Excise Administration, and the subsequent fall on the inauguration of a temperance policy under the Reforms.

2.—The slow increase in stamp revenue is hardly in proportion to the rise in prices and increased wealth of the Province. The effect of increased rates was only partially felt in the slight rise in 1922-23.



case a saving accrues does not ultimately lose because the unfinished portion of the work appears in the Budget of the next year as a work in progress.

96. The last and the most important duty in connection with the Budget is to see that allotments are not exceeded. With a vigilant Council, jealous of its rights, the expenditure of sums substantially in excess of Budget provision will embarrass Government very seriously, because the fundamental fact of the constitution is that in voted heads there must be no expenditure for which the Council has not provided funds. For this purpose Heads of Departments have to make such arrangements as conditions in their respective departments require. The main principle is, however, the same in every case. Starting from the bottom the Disbursing Officer must not without authority exceed the sum assigned to him under each primary unit of appropriation. If he has reason to desire or expect increased expenditure he should apply to his superior officer for funds. If the Head of a Department finds no source of reappropriation in any of the minor heads of his department, it then becomes necessary either to find money from the Civil Contingencies Fund or to go to the Council for a supplementary demand.

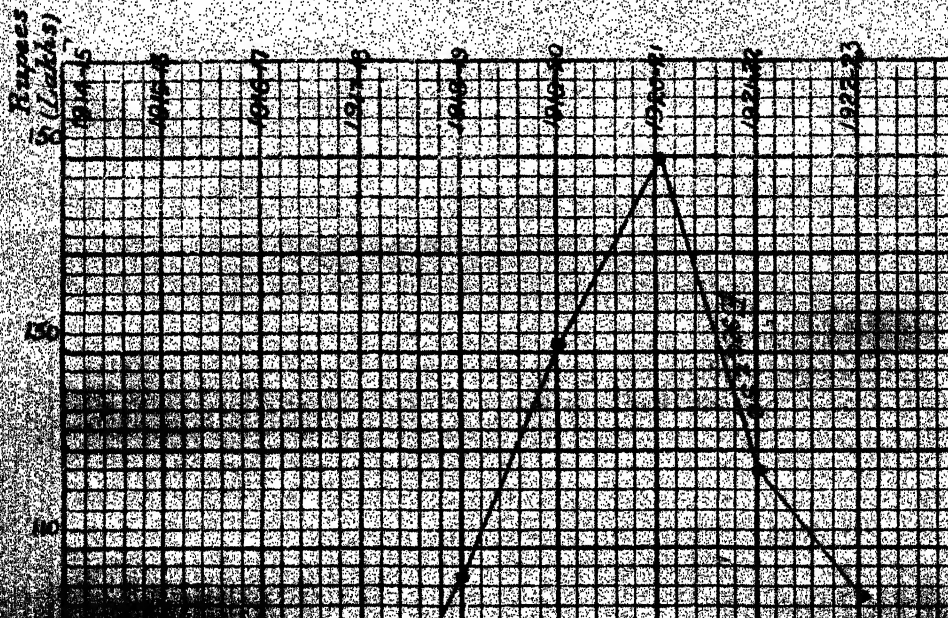
97. The Stamp Revenue is derived from two classes of stamps. Under the Court-fees Act, 1870, by which judicial stamps must be placed on legal documents, a very inadequate tax is levied on litigation, the most flourishing and least profitable industry of the Province. By the Stamp Act, 1899, non-judicial or revenue stamps must be affixed to such documents as bills of exchange, share transfers, legal practitioners' licenses and cheques. The revenue from stamps has not expanded with the increase in the wealth of the Province and the price level. In the year 1922, however, the duty on both classes of stamps was raised to roughly double the previous amount. Little of the increased revenue, however, came in the year 1922-23 as will be seen from the Statement below.

	Judicial Receipts.	Non-Judicial Receipts.	Total Receipts.	Charges.	Net Receipts.
1921-22	51	32	83	3	80
1922-23	52	31	83	3	80

PUNJAB GOVERNMENT. EXCISE AND STAMP REVENUE.

NOTE 1.—The rapid rise in excise revenue with the growing wealth of the Province and the increased efficiency of the Excise Administration, and the subsequent fall on the inauguration of a temperance policy under the Reforms.

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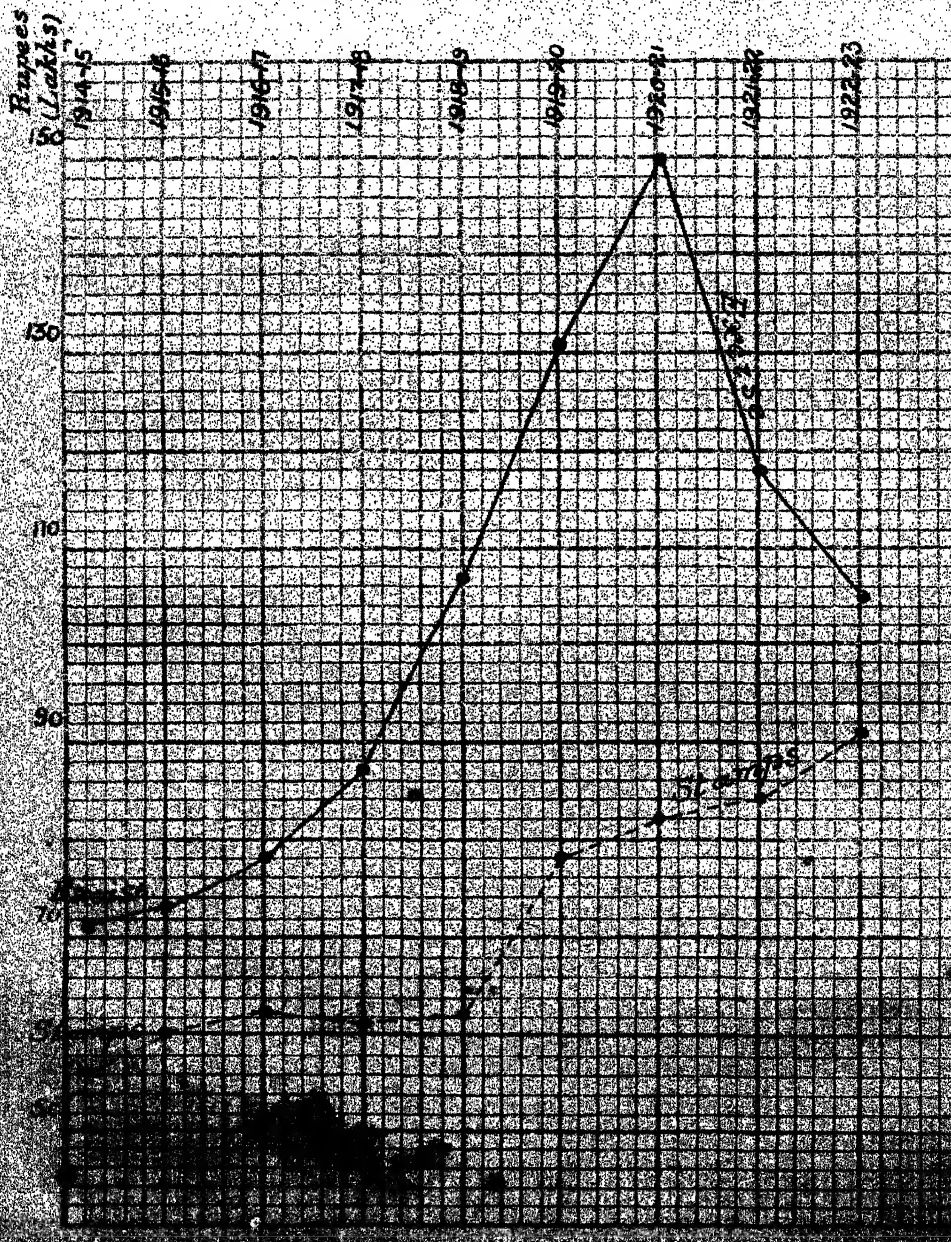
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	Judicial Receipts.	Non-Judicial Receipts.	Total Receipts.	Change	Net receipts.
1921-22	54	82	88	2	86
1922-23	54	81	86	2	84

PUNJAB GOVERNMENT. EXCISE AND STAMP REVENUE.

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	Judicial Receipts.	Non-Judicial Receipts.	Total Receipts.	Charges.	Net receipts.
1921-22	51	32	83	3	80
1922-23	59	31	90	3	87

The increase of Rs. 8 lakhs in judicial receipts, though partly due to the enhanced rates, is also mainly due to increased litigation; while in the case of non-judicial stamps tightness of the money market and good harvests, resulting in prosperous agriculturists and diminished mortgages, have collectively led to a decrease of Rs. 1 lakh in the income.

32. The statement below gives an abstract of the revenue and consumption of Excise commodities for the years 1921-22 and 1922-23 :—

	REVENUE		CONSUMPTION	
	(Lakhs of Rupees).		(Thousands of Gallons; Thousands of Sacs).	
	1921-22.	1922-23	1921-22.	1922-23.
Country Spirit ..	19	47	3,01	1,83
Beer ...	7	9	19,48	16,46
Wine Spirits ...	6	17	1,09	1,82
Hemp ..	30	20	18	55
Hemp drugs ..	14	14	93	93
Total Revenue ...	1,13	1,10		
Expenditure ...	1	3		
Net Revenue ...	1,12	1,02		

It will be seen that the net revenue which was Rs. 145 lakhs in 1920-21 and fell to Rs. 112 lakhs in 1921-22 has again fallen to Rs. 102 lakhs in 1922-23. This fall is due to the decreased licit consumption for country spirit following on the temperance policy of Government, in consequence of which though the rate of duty has been increased the receipts under this head have again fallen by Rs. 12 to 47 lakhs. But the enhanced price of country spirit caused a slightly increased consumption of Indian made beer and a considerably increased consumption of foreign liquors, which combined with the increased duty has brought an increased income under these heads of Rs. 6 lakhs. In the case of hemp drugs, *churas* and *bhanga*, both revenue and consumption have remained practically stationary. In

In this case the limit of prohibition seems to have been reached. A further enhancement would not lead to increased temperance but only to increased smuggling and consequent reduction in legitimate income.

99. The same limit has been reached in the case of all

Excise commodities. The retail price of
Opium smuggling

Excise opium has now risen so high that it is a very profitable business to smuggle opium into the Province from Rajputana and the North-West Frontier Province. Seven years ago the price of opium in the Province was so low that it was necessary to restrict issues to retail shops in order to prevent opium being smuggled out of the country. Now the price of opium is so high that it is unnecessary to limit the supply to each retailer. The difficulty now is not to prevent opium from leaving the Province but to prevent it from coming in from outside. Unless special arrangements are made for largely increasing the preventive staff, it will be difficult to raise the issue price of Excise opium very much higher. Every such increase in price is a stimulus to smugglers and must cause a falling off in the licit consumption and probably also in the total income. The year 1922-23 has witnessed a considerable decrease in licit consumption, though it is doubtful how far there has been a decrease in real consumption. The increased duty has, however, prevented any loss to Government, though a further increase in duty would probably result in a diminished revenue combined with large increase in smuggling.

100. But it is in the case of country spirit that these principles are most clearly exemplified.

Gallonage system
of fees for country
spirit retail vend
licenses.

Political agitation in the year 1921-22 culminated in a vigorous campaign against liquor shops just before the licenses for those shops were auctioned. It was accordingly decided to modify the auction system. In January 1922 country liquor and bazar foreign liquor auctions were a complete failure. In most districts intimidation was openly practised. Frequently no bids were received at all. Deputy Commissioners were accordingly directed to call for tenders, but before these could be accepted it was decided to effect a radical alteration in the whole vend fee system. All negotiations were called off and tenders were invited for licenses under this new system. This substituted for

the lump sum fixed fee for the whole year a fee payable on every gallon of 30° under proof liquor which was drawn by the licensee from the distiller or wholesaler. The still-head duty was raised from Rs 10-10-0 to Rs. 14-1-0 per gallon, and it was anticipated that the necessity for keeping down the retail price would lower the vend fee rates

101 Both the new vend fee system and the new duty took effect from 1st April 1922. Tenders were not an essential part of the new system, but political excitement, though on the wane, had not died down, and it was decided not to risk auctions again. A retail licensee has not now the same incentive to push the sale of his goods as he would have if he had paid a lump sum for the right to sell the article and had to recoup himself before he could make any profit. Moreover, with the new gallonage or surcharge rate, he can always reduce his losses to a minimum by refraining from selling liquor if he has inadvertently tendered at too high a rate. As a matter of fact, it was found that many persons did tender at rates which were ridiculously high. Their object was probably to play into the hands of those persons who were endeavouring to close liquor shops forcibly. They could do this quite easily by refraining from selling liquor at shops for which they were selected or else by selling it in such minute quantities as not to suffice for the needs of the local population. It had been calculated that a fee of Rs 8 per gallon in cities and Rs 4 in the country were such as licensees could afford. Where these rates were exceeded the shops were generally transferred to reliable licensees at reasonable rates.

102 The astounding decrease in the consumption of country spirit from 301,000 to 188,000 gallons (*para. 98*) would be a reason for congratulation if it were certain that it represented an actual decrease in the consumption of alcoholic liquor. Unfortunately there is reason to suppose that the decrease in the consumption of liquor on which duty has been paid has been to some extent balanced by an increase in the consumption of illicit liquor. It is impossible to say to what extent illicit liquor has displaced licit liquor, but it may be conjectured that the displacement is not to the full amount of the difference between the

figures of consumption in the year under report (188 thousand gallons) and the previous year (301 thousand gallons). The reduction is partly to be attributed to the efforts of political reformers who have really persuaded some people to restrict their taste for alcohol. Political agitation has, in fact, diminished revenue in two ways. The personal appeal to the individual has, in some cases, induced him to restrict his consumption while the contempt for authority which it has inspired has facilitated illicit distillation.

103 The Excise policy of the Punjab Government aims at securing the minimum of consumption, but that the proportion of profits from that minimum of consumption which is to accrue to the State should be as large as possible. In practice this policy implies an increase in still-head duty and a diminution in the number of licensed shops. The still-head duty was raised from Rs 7-8-0 to Rs 10-10-0 a gallon in November 1921 and again to Rs 14-1-0 in April 1922. The number of licensed country liquor shops which was 666 in 1919-20 fell to 567 in 1921-22 and again to 525 in 1922-23. These shops are in the proportion of 7 to every 100,000 of the urban population and 2 to every 100,000 of the rural population. This proportion is less than that of any other of the major provinces of India and probably reduction has been carried too far. As a result the price of liquor has been forced up beyond the natural increase in price due to the increased still-head duty or to the increased license fees. Shops, especially in rural areas, are now at such distances from each other that the licensee of each shop has a monopoly of the sale of liquor in the neighbourhood and is able therefore to force up the price without fear of competition. This increased price would not be a bad thing if Government shared the profit but in practice the whole increase over and above that due to the increased still-head duty and license fees goes into the pocket of the licensee, who finds it profitable to sell a small quantity at a higher price rather than a larger quantity at a lower price. In fact, the retail licensee has done so well out of the new arrangements that he is able to ignore the competition of the illicit distiller whom he appears to regard now with a mild toleration, if indeed he is not frequently in league with him.

104. The high price of country spirit, both plain and spiced, has undoubtedly given an impetus to illicit distillation in those areas where it was common in past years. It has also stimulated the activities of smugglers from Indian States. Most of these States enjoy a concession under which travellers from the States into the Punjab are allowed to take with them country spirit not exceeding one quart bottle in quantity. This concession is being abused on a very large scale. Even if a man keeps within the law, he can make a large profit by going to and fro from an adjacent State and bringing with him one bottle at a time. In Ambala City, for example, there was a constant stream of men returning from Patiala territory by train each bringing with him a bottle of country spirit bought in the State. In the Simla district an Indian State allowed a shop to open within 50 yards of British territory. The shop did a roaring trade in the sale of country spirit to people from the Simla district. The extent to which this trade of export from the State shops to the Punjab has increased may be judged from the fact that one shop in an adjacent State which used to be sold for Rs. 28,000 two years ago is now sold for Rs. 1,20,000. The difference should have accrued to the Punjab Government instead of the State, because it represents entirely the profits derived from exporting spirits from the State into the Punjab.

105. All these facts tend to shew that for the present a limit has been reached in the reduction of facilities for obtaining licit country spirit. Before making any further advance it will be necessary to wait until reformers have induced people to refrain from using illicit spirit in place of licit spirit. But the admonitions of reformers will be more effective when supported by the preventive action of an increased Excise staff. The increased cost can be partly met by the increased revenue due to the substitution of licit for illicit spirit, but it would be erroneous to suppose that the whole cost of an increase in the preventive staff can be made up in this way. The drinker of illicit spirit will not always be able to afford to drink licit spirit, and if we put down illicit consumption with a strong hand, we must be prepared to stand the cost. There is another point to remember. No conceivable increase in the number of the

A temperance policy requires—
(1) a large preventive staff; and
(2) public sympathy.

preventive Excise staff can possibly effect a complete cessation of illicit distillation or indeed even a considerable reduction in illicit distillation, unless the people themselves are on the side of Government and will help Government in securing these ends.* It is here that Temperance Societies can most usefully do their work. If the people do not wish to be sober and if they intend to consume excisable articles whether they can obtain them licitly or not, it will be obviously foolish for Government to go any further and to restrict the sale of licit, and thus to encourage the sale of illicit excisable articles.

106. By the Financial arrangements made under the Reform Scheme income-tax receipts, half of which were previously credited to the Province, are now credited to the Imperial Government.† The new Income-tax Department came into being on the 1st September 1921. From the start it was charged with the assessment of the whole Province, and upon the introduction of the new Income-tax Act on the 1st April 1922 it passed from the control of the Local Government to that of the Imperial Inland Board of Revenue. The new department started with a staff of two Assistant Commissioners (pay Rs. 1,000—50—1,500 per mensem) to hear appeals, 20 Income-tax Officers (subsequently increased to 26), (Rs. 300—40—850) to do the work of assessment and 54 Inspectors (subsequently increased to 56), (Rs. 120—7½—240), for survey and enquiry. Owing to the provisional amalgamation of the North-West Frontier Province with the Punjab for Income-tax purposes, a third Assistant Commissioner was subsequently added.

107. The Department started with an inexperienced staff. This was an unavoidable result of the policy of handing over the assessment of the Province to the new department at its birth. In most other provinces the transfer is being gradually effected, a course for which there is much to be said. The second difficulty was the impossibility of giving the staff any training, as the department was created in the middle of the year and was faced at the outset with the

* Readers of Scott's *Guy Manners* will recall the very similar attitude of the natives of Scotland towards the English Excise Administration in the eighteenth century.

† See 1921-22 Report, I. 121.

necessity of doing twelve months' work in six. It was not till 1922-23 that any systematic training could be attempted, and that only in the case of new appointments. Moreover a new Act was introduced in April 1922 involving a number of changes in law and procedure, which required close attention on the part of the staff. The old system of registers, too, was scrapped and replaced by that in force in the United Provinces. This imposed a heavy task upon the clerical staff which was almost as untrained as the executive. Finally, as a result of systematic survey and enquiry there was a great expansion of work without a corresponding expansion of staff. The latter was only continued towards the close of 1922-23.

108 The results of the last two years working are shewn from the following table:—
Results of the assessment

	Assessee.	Demand (after deducting adjustments) Rs. (in lakhs).	Collecting Rs. (in lakhs).	Arrears (at close of year) Rs. (in lakhs)
1921-22	21,387	55	57	47
1922-23	24,683	75	82	57

With a population of just under 21 millions there are 24,683 assesseees, of whom 3,011 are salary cases. Taking the demand of 70 lakhs, which is approximately what it is likely to be after all the appeals have been heard, we get an average tax of Rs. 284 per assessee. Considering that less than 8 lakhs are paid by companies, this is a tolerably high average, and it would be interesting to compare it with the average for other provinces similarly situated. Taking the urban* population of the Province 2,212,191 we find that the demand works out to Rs. 3-3-0 per head or Rs. 14-5-0 per family.† With this may be compared the land revenue demand of the Province (Rs. 440 lakhs), which gives an average of Rs. 2-6-0 per head of the rural population‡ or Rs. 10-11-0 per family. The urban classes are now, perhaps for the first time, paying something like their fair share of taxation. Another point of interest is that,

* By urban is meant any municipal area, cantonment or town of 5,000 inhabitants or more.

† According to the latest census report the average number of persons per house is 4.5

‡ 18½ millions.

though Muhanimadans preponderate in the Province, only 1,880 of them, or less than 5 per cent. of the total number of assesseees, pay income-tax. This shows how little of the trade of the Province is in their hands

109 The work of the new department has been done with less respect of persons than perhaps was possible under the old *regime*, and many wealthy men have discovered this to their cost. At the same time every precaution has been taken against possible over-assessment, and Income-tax Officers have been ordered to make enquiries into all marginal cases, and where there is a genuine doubt, assessment has been cancelled. Over 3,000 new assesseees were discovered during the year (1922-23), and that it should have been possible to do this in a year of slack trade is due to under-assessment in the past and to the wide extension of the survey system which was already in force. Under this system it has for some years been the practice in the large towns to make house to house or shop to shop enquiries and to note the result in an Income-tax Doomsday book called the survey register. In the year 1922-23 nearly 73,000 shops and houses were surveyed in this way, and by the end of the current year it is hoped that the survey of the whole Province will be completed. How fruitful the system can be, may be gathered from the example of Rawalpindi where as many as 322 new assesseees were discovered. It may be doubted whether anything like our present number of assesseees (24,683) could have been obtained without the help of the system, which however requires a large subordinate staff and careful control

110. Two years ago (1920-21) house property yielded only Rs. 1·24 lakhs; last year (1922-23) over Rs. 4 lakhs were obtained. In Lahore alone the demand has risen from Rs. 16,645 to Rs. 1,32,000. This remarkable increase, which rests upon definitely ascertained facts, is mainly due to more accurate survey, and in some areas to a systematic classification of house property. The latter has been found to be so fruitful that it is being adopted in all important urban centres. Formerly much reliance was placed upon municipal registers, but experience shows that this is not always wise. Ten years ago the tax upon official salaries formed 25 per cent. of the demand. It is now no more than 10 per cent. Even so,

the proportion is probably still too high. Another satisfactory change is that, thanks to the new Act, private employees no longer escape to the extent to which they did, and they now pay ten times as much as they did last year. The legal profession before was notoriously under-assessed. Now altogether 782 pleaders out of a total number of 1 534 have been taxed on an income of 45 lakhs. It has been said that litigation is the second most important industry of the Province. In view of this it may be doubted whether the legal profession is yet fully assessed. In Lahore, for instance, only 72 out of 293 are taxed. The difficulty in the matter is the inability or reluctance of most lawyers to produce accounts.

111. Even more important than litigation is money-lending. This is shown by the fact that ^{The village money lender.} 6,618 rural money-lenders are taxed upon a total income of 1½ crores. This means that out of every four assessees at least one is a village money-lender. There is no class whom it is more difficult to assess fairly. Their accounts are of the simplest character and kept in the most haphazard way, and there is no means of ascertaining whether all have been produced or not. The money-lender, too, is the shyest and most secretive of men. His assessment, therefore, is mainly a matter of guess work based upon local enquiry, and is more a tax upon reputation and status than upon ascertained income. That he is over-taxed may be doubted, for enquiries made in another connection* suggest that the total rural debt of the Province is not less than 75 crores, upon which interest charges at the moderate rate of 12 per cent. would amount to 9 crores whereas at present less than two crores of income are taxed.†

112. The efficiency of the new department has perhaps been shown as much in its collections as in its assessment. In 1922-23 82 lakhs were collected against only 49 lakhs in 1920-21. The assessee has still to be educated to punctual payment. Penalties had to be imposed in over 5,000 cases. The

* See Proceedings of the sixth Annual Conference of the Indian Economic Association 1923, page 141 where proprietors' debt is estimated to be 65 crores. To this must be added at least another 10 crores on account of tenants.

† Even if we deduct 3 crores as the value of interest charges on mortgages with possession which would not be taxable, six crores remain.

results have been excellent: but there are still places—Lahore is the most glaring example—where the assessee has yet to learn that revenue due to Government must be paid by the prescribed date. Penalties are naturally resented, but the remedy is entirely in the assessee's hands. They are only imposed in so far as they are required to obtain punctual payment, and there is of course no idea, as is sometimes supposed, of making them an additional source of revenue.

113. The chief difficulty in making a fair assessment lies in the great reluctance shown by assesseees to produce their income or to produce their accounts. Even when accounts are produced it is often impossible, owing to the way in which they are kept, to work out exact profit or loss. All that can be done, till better accounts are produced is to make careful enquiry as to the normal rates of profit in each trade. Where exact profits cannot be ascertained a flat rate is applied to turn-over. This is a most unsatisfactory method of assessment, but in the circumstances it is unavoidable. The insistence upon the production of accounts and the increasing care which is taken in their examination are beginning to have an educative effect upon the business methods of the Province, so that even from the point of view of the assessee there may be something to be said for income-tax.

114. In only one place has the increase in assessment led to agitation. This occurred in Amritsar in the early summer of 1922 and was due to various causes. Amritsar had hitherto escaped with a light assessment and during the boom years which followed the close of the war many lakhs of revenue were lost to Government. In 1921-22, for the first time, a systematic attempt was made to enhance the tax, without respect of persons, to something like its proper figure. The operation caused more than the usual discomfort, as it coincided with the end of the boom. Moreover, the almost entire absence of accounts made it impossible, except in a comparatively few cases, to calculate profits with any exactitude. A good instance of this is the piece-goods trade, which is the most important in Amritsar. In 1921-22 out of over 150 merchants only 17 submitted accounts. Though Amritsar is the commercial capital of the

Punjab, and has direct commercial dealings with England, America and Japan, in this respect at least, it has proved itself to be behind any other large town in the Province. In 1922-23, for instance, which was much better than the year before, hardly more than one out of every three assesses produced accounts. This may be compared with Ludhiana also a piece-goods centre, where over 70 per cent produced them. When accounts are withheld, there is a natural presumption that the tax is not excessive, and, till the contrary is proved by their production, this is the presumption that must be drawn in regard to Amritsar.

and these are commodities for which, as the world progresses, the demand must be constant and increasing. I cannot put too much stress on the wonderful opportunity which the Punjab has of producing the special qualities of wheat and cotton required to meet this demand. Their supply constitutes a formidable economic problem for many countries in the world, but the Punjab is placed in the favourable position of being able to meet its own needs and help to fill the gap in the world's supply also. It is not possible to over-estimate the great importance of increased production for India, as we are at present passing through a period where unfortunately reduction figures more prominently than production. If India produced more, not only would this increased production bring in its train more wealth and comfort for each individual producer, but indirectly more revenue would accrue to the State from railway receipts from customs duties on imports purchased in the process of the expansion of wealth and in many other indirect ways. Those ill-omened twin stars retrenchment and taxation by which the Government in hard times is often forced to steer its course, might in such circumstances sink low on our horizon. By retrenchment I mean not the economical working of the Government machine, but a forced reduction in expenditure on beneficent activities.

117. " Judged by these tests the labours of the Punjab Agricultural Department are of inestimable value, both to the Government and to the people of the Punjab. I envy the Ministers under the reformed Government who have the beneficent activities of the Agricultural Department in their charge. There can be no subject which offers so congenial and fascinating a field for the improvement of the condition of a province and its people. Agricultural research is a most legitimate and worthy object for the benefactions of generous donors. In many parts of the world scientific research of various kinds benefits very materially from trust funds established by private persons. India has instances of such generosity in the Institute of Science at Bangalore. As regards agricultural research, I may draw attention in particular to the great institution at Rothamsted in England, which has done magnificent work for agriculture both in England and other countries, and to the foundation and maintenance of which private generosity has so largely contributed. I hope some

day of sequestration of individuals in the town and within the area of the college have proved a serious handicap for the students. Then follows Punjab's share in the problem of indigestion in this province.

It is here I have been greatly impressed by the fact that the students of the Lyallpur Agricultural College are not only keenly interested in the study of agriculture but also in the study of the social and economic conditions of this great country. Too many are prone not to look beyond the career of the lawyer or the doctor as the only possible goal of their educational career. In these vocations there is obviously room for only a limited number, and the opportunities for an outstanding and successful career are definitely restricted. Yet around them lies a vast country full of natural resources and with a population as yet largely deprived of the advantages of technical and scientific training. In every direction there are sources of wealth and production waiting to be explored, waiting to be approved and ready to yield their secrets to the magic touch of knowledge. In this field it appears to me that the students of this College can play a notable part. They go forth from the College as pioneers of developments of immense potential service to themselves and their Province. They can practise the improved methods of agriculture learnt here, and instruct by their example their neighbours who have not had the good fortune to participate in the technical education received by them. Agriculture is a science, and in agriculture, as in other branches of human knowledge, no finite stage has yet been reached. Denmark and other countries which have specialised in agricultural science have successfully demonstrated the vast and continuous improvements in agriculture which the spread of knowledge can produce, and the great increase in wealth which the diffusion of technical methods never fails to achieve. Let me impress these facts on the students of the College and congratulate them on the great opportunities which their education in the Lyallpur Agricultural College has placed in their path."

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day to see private individuals in the Lyallpur with a letter from me. They have quoted the Department's attitude for the benefit of their fellow-Punjabis, advising them to keep their noses to the grindstone in this province.

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117 " Judged by these tests the labours of the Punjab Agricultural Research Department are of inestimable value, both to the Government and to the people of the Punjab. I envy the Ministers under the reformed Government who have the beneficent activities of the Agricultural Department in their charge. There can be no subject which offers so congenial and fascinating a field for the improvement of the condition of a province and its people. Agricultural research is a most legitimate and worthy object for the benefactions of generous donors. In many parts of the world scientific research of various kinds benefits very materially from trust funds established by private persons. India has instances of such generosity in the Institute of Science at Bangalore. As regards agricultural research, I may draw attention in particular to the great institution at Rothamsted in England, which has done magnificent work for agriculture both in England and other countries, and to the foundation and maintenance of which private generosity has so largely contributed. I hope some

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116 I have been greatly impressed in India with the narrow field of aspirations which bounds the vision of the educated youngmen of this great country. Too many are prone not to look beyond Government service or the legal profession as the only possible goal of their educational career. In these vocations there is obviously room for only a limited number, and the opportunities for an outstanding and successful career are definitely restricted. Yet around them lies a vast country full of natural resources and with a population as yet largely deprived of the advantages of technical and scientific training. In every direction there are sources of wealth and production waiting to be explored, waiting to be approved and ready to yield their secrets to the magic touch of knowledge. In this field it appears to me that the students of this College can play a notable part. They go forth from the College as pioneers of developments, of immense potential service to themselves and their Province. They can practise the improved methods of agriculture learnt here, and instruct by their example their neighbours who have not had the good fortune to participate in the technical education received by them. Agriculture is a science, and in agriculture, as in other branches of human knowledge, no finite stage has yet been reached. Denmark and other countries which have specialised in agricultural science have successfully demonstrated the vast and continuous improvements in agriculture which the spread of knowledge can produce, and the great increase in wealth which the diffusion of technical methods never fails to achieve. Let me impress these facts on the students of the College, and congratulate them on the great opportunities which their education in the Lyallpur Agricultural College has placed in their path.

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tracts. July rainfall was below normal, but good rains fell in August and the first half of September throughout the Province, except in parts of the west, where as usual the rainfall was very much lighter. Gales accompanied the rain and caused some damage to standing *kharif* crops, particularly cotton. The monsoon ended about the 22nd September, though some rain fell in the extreme north towards the close of the month. As compared with the average of previous years the rainfall was considerably heavier in the south-east and sub-montane districts. The *kharif* acreage in the south-east, where the crops are mainly dependent on rainfall, was consequently much above the average. In Hisar the staple crop of *bajra* covered nearly a million acres, or 161 per cent. of the normal. The September rains were followed by light showers in the first and second weeks of October which enabled good *rabi* sowings to be made. There was no further rain till the second and third weeks of December, but the rain received was adequate for *rabi* sowings and the maturing of *kharif* crops. The rains after Christmas 1922 were heavier than usual, beginning on the 9th January and continuing till the middle of March and being especially heavy in February. They were particularly useful for the unirrigated *rabi* crops, though the cloudy weather which accompanied them caused some damage to the wheat from rust. As usual some damage was caused in March by sporadic hailstorms. The dry weather in April was favourable for harvesting operations, but unceasing rain in May did considerable damage to straw and grain on the threshing floor in most districts. Canals ran well throughout the winter, though the Lower Bari Doab Canal was closed for a long time in February.

120. The following statement will give a general idea of the relative importance of the various crops:—

Relative importance of principal crops.

Area, Outturn and Value of Crops, 1922-23.

1	2	3			4			5			6	
		SOWN AREA			PRODUCE.			APPROXIMATE VALUE			VALUE PER ACRE.	
		(Million acres).			(Million tons) (bales cotton).			Crore Rupees (a).			Rupees (b).	
		Irrigated.	Unirrigated.	Total.	Irrigated.	Unirrigated.	Total.	Irrigated.	Unirrigated.	Total.	Irrigated.	Unirrigated.
1	Wheat ...	5.0	4.6	9.6	2.0	1.2	3.2	21.7	12.3	34.0	43	27
2	Barley ...	3	3	1.1	2	2	4	9	1.3	3.2	27	16
3	Rice ...	7	2	9	4	1	5	3.6	5	4.1	49	28
4	Maize ...	5	6	1.1	2	2	4	1.9	1.5	3.3	35	26
5	Bajra ...	4	2.7	3.1	1	3	4	8	2.7	3.5	20	10
6	Jowar ...	2	8	1.0	0	1	1	4	7	1.1	19	13
7	Gram ...	1.1	4.3	5.4	2	1.1	1.5	3.0	8.5	11.5	25	26
8	Oilseeds ...	6	9	1.5	1	1	2	2.2	2.1	4.3	36	24
9	Sugar cane ...	4	1	5	4	0	4	6.5	8	7.1	150	94
10	Cotton ...	1.2	1	1.3	1.1	1	1.2	7.4	4	7.3	64	33
11	Fodder crops ...	2.5	7	4.3				7.5	3.4	10.9	30	20
	Total crops	12.0	16.8	28.7	4.0	3.4	6.3	53.8	34.0	39.8		

(a) Column 3 × column 6.

(b) Yield per acre × harvest prices.

It should be remembered that while we have a very accurate knowledge of the acreage the estimate as to the yield of the various crops must be accepted with considerable hesitation. The principal exporting firms, for example, get fairly good results by assuming that the wheat outturn is 33 per cent greater than the official estimate. The official returns are probably, however, not so much underestimated as that. An enquiry is being made into the whole question, including the possibility of determining the quantities of grain which are actually stocked in the Province. It is clear that the enquiry will be greatly facilitated by the knowledge of the quantities of grain exported. The Internal Trade Report has recently been abolished, but the question is now under consideration as to whether it cannot be con-

tinued in a simpler and cheaper form, which will enable all the necessary information to be obtained without so much expense. But the estimate of the value of outturn gives approximately accurate information as to the relative values of the principal crops. The above statement shews that the wheat crop is the most important, being worth about Rs. 34 crores. The gram crop comes next (the year being a very favourable one for this crop) and is worth Rs. 11½ crores. The next important crops are cotton and sugarcane worth about Rs. 7 crores each. The value of sugarcane is especially remarkable in view of the small area (only half a million acres) devoted to its cultivation.

121. The only way of getting at a good estimate of the present harvest is to compare it with those of previous years. The total irrigated area has risen by 2 million acres in the last 8 years. Of this about half a million acres each has been put under wheat and fodder crops, respectively, and the other million acres has been devoted to other crops. The increase in the irrigated wheat acreage continued up to 1920-21, but since then the amount has remained stationary,* though the total irrigated area has continued to increase. Uncertainty as to the prospects of the wheat export trade may have acted to induce zamindars to devote their attention to other valuable crops, such as cotton or sugarcane. The increase in the irrigated acreage under fodder crops may be attributed to the necessity for providing the extra fodder required for the cattle in the new irrigated areas in view of the restriction of their natural grazing grounds, for the extension of irrigation necessitates extra cattle for ploughing and milk for the new population, while it does away with large areas previously available for grazing. With the exception of wheat, sugarcane, fodder crops and cotton the irrigated areas of the various crops have remained practically stationary. The small acreage under sugarcane has steadily increased from 30 to 44 million acres as above noted. Though the area is small the intrinsic importance of the increase is great in view of the value of the crop. It is to be hoped that the time may come when with proper sugar-refining factories in the sugarcane-producing areas, the Punjab may become self-supporting in the production of sugar.

*See graph.

PRINCIPAL IRRIGATED CROPS.

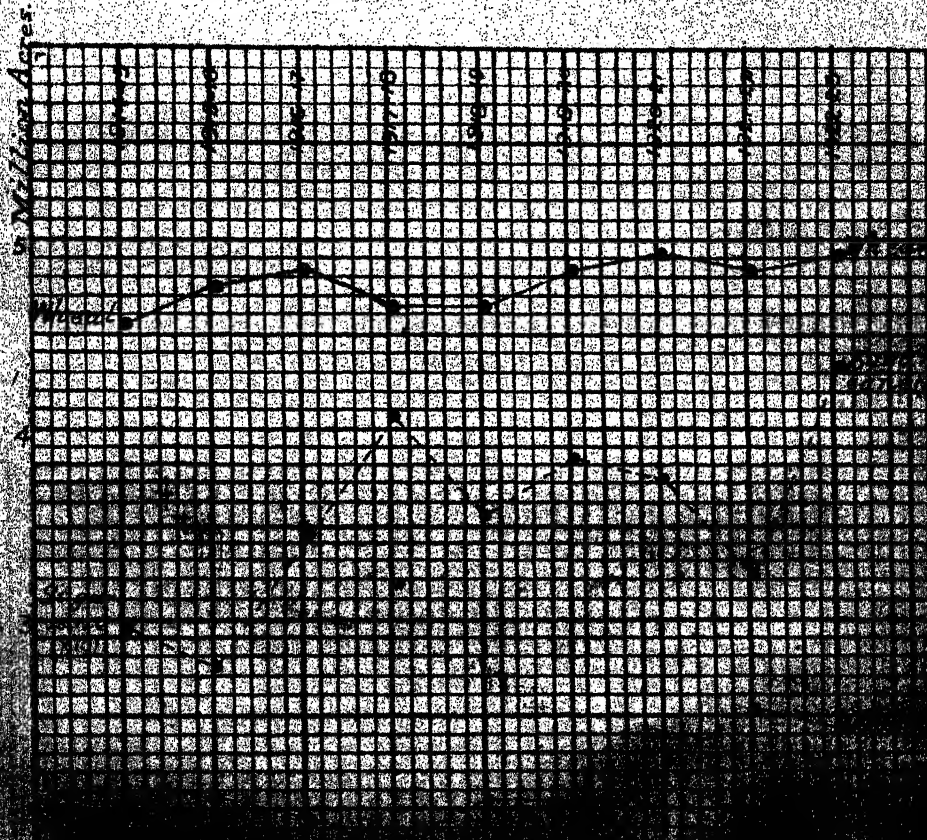
(Sugarcane is multiplied by 10.)

NOTE.—Slight steady increase in wheat, fodder and sugarcane.

Violent fluctuations in cotton due to varying fortunes of American cotton.

The fluctuations in sugarcane appear larger than they really are owing to the average being multiplied by 10.

Only the irrigated portions of the crops are given



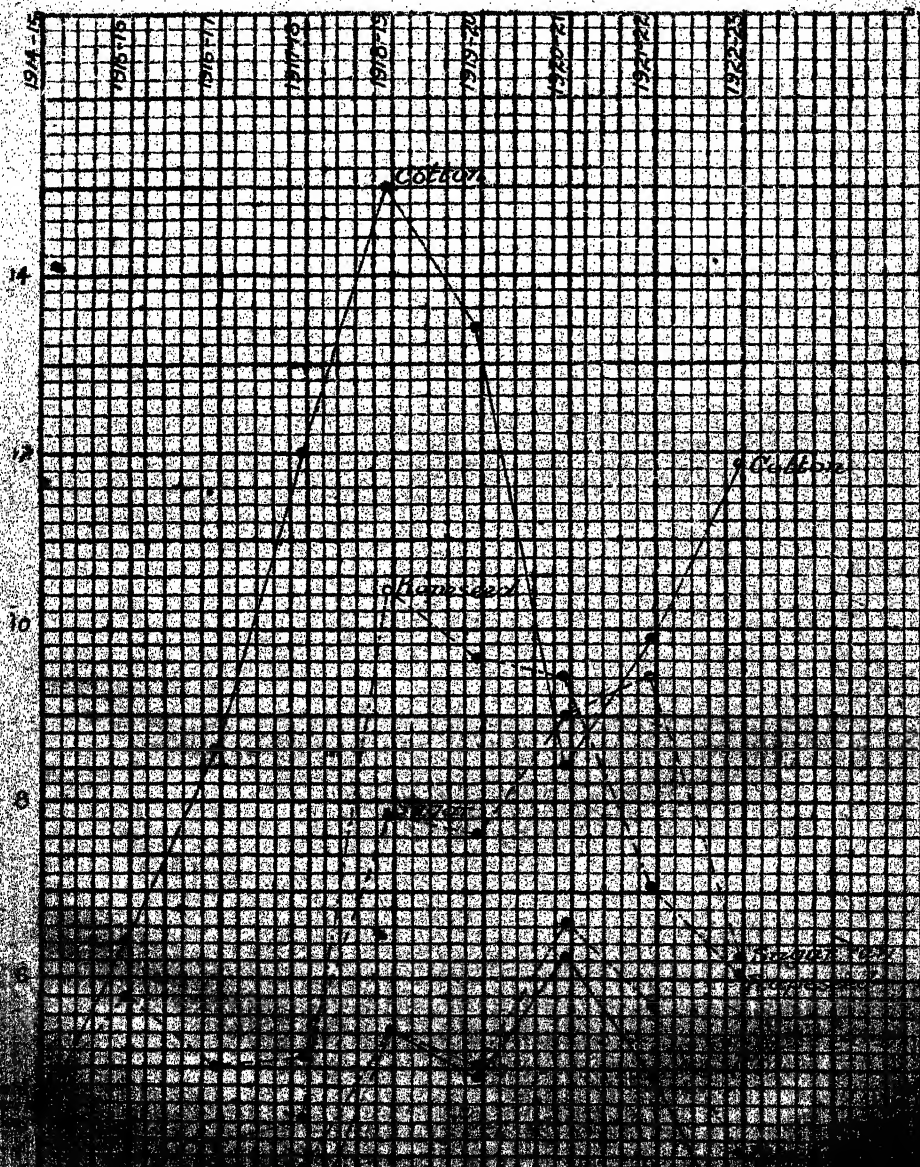
HARVEST PRICES.

Notes 1.—Prices generally rose to a maximum in 1920 and then fell.

2.—Prices of wheat and gram—principal food grains vary together, gram being always slightly less than wheat.

3.—Recent rise in price of cotton owing to the failure of American crop.

4.—Area under cotton varies rate with price.



122. The accompanying graph shews clearly that harvest prices tended to rise to a maximum at the end of the war and the post-war years of 1918-19 to 1920-21. Since then there has been a fall. The only exception to this is due to the recent failure of the American crop owing to the boll-weevil plague, which has dealt to American cotton a blow from which it can with difficulty recover. As far as deductions can be made from this diagram it may be inferred that cotton will be the most profitable crop to grow in the future, as the world's demand is likely to be maintained, and there should be no fear of the prices falling for some time. Wheat and gram have fallen heavily to very nearly pre-war prices. The export of wheat had entirely ceased* owing to the large Canadian crop anticipated this year. As the local market for sugar is unlimited, sugarcane should always prove remunerative for those who are prepared to work hard at it. Its price still remains above pre-war level. The demand for oil-seeds abroad still continues and the price is also above pre-war level. *Toria* should still, therefore, prove a profitable investment for growers.

123. The acreage under cotton is slightly greater than that of last year. The early monsoon was favourable for late sowings, and the supply of canal water was good, but the main factor in the cotton acreage is the market price of cotton, and it is extraordinary how the total acreage under cotton varies with the price. Of the total area about two-thirds is under *desi* and one-third under American cotton. Owing to its longer and finer staple and other obvious advantages the proportion under American cotton steadily increased from its first introduction and reached a maximum in 1921-22 when the crops suffered severely at the beginning of the cold weather owing to a lack of sufficient water.† This misfortune greatly diminished its popularity with the result that this year (1922-23) the proportion of American cotton sown has been very much less. The figures given below show clearly how great was the loss sustained, the total production of cleaned cotton in 1921-22 being only half that of the pre-

* This of course applies to the year ending 15th June 1923. Wheat export however revived during the latter half of the year 1923.

† See 1921-22 Report, I, 519, II, 41.

ceding year and the exports being consequently greatly diminished —

Year	Total production of cotton (in lakhs of bales)	Value in 1st October to 30th September (in thousands of rupees)	Net exports from 1st October to 30th September (in thousands of rupees)	Total of columns 3 and 4	Balance columns 5-6
1919-20	5.16	59	2547	2517	-770
1920-21	2.53	3	2595	2591	-5.2
1921-22	1.17	4	1800	1817	+10

124. The variety of American cotton referred to above was denominated 4-F by the Punjab Agricultural Department to whom its introduction was due. In 1919 the lint from 4-F was trash on large areas, and again to a less extent in 1920. In 1921 the crop of lint was again as bad as in 1919. This led many people to believe that these cottons had cross-fertilized and had permanently deteriorated. The good quality of lint got from the 1922 crop of plants reared from seeds of these cottons, however, has shewn that that interpretation of the case was untenable. Put very briefly, the cause was insufficient water for the needs of the plants during the flowering and fruiting seasons. This again was due very greatly to high prices of wheat and *toria* which induced farmers to prepare a larger area of land for these crops in September, October and early November than previously, thus leaving a diminished supply of irrigation water for American cottons during the time they were flowering and developing their fibre. The trouble was of course most felt in the drier parts of the Province and *desi* cottons being more drought-resistant than Americans were less harmed. *Desis* were also very seriously affected however. During the investigation into the case, it was observed that even in the worst affected areas, there were plants yielding good American fibre where the crop had got plenty of water during the flowering and fruiting time, and were sheltered from desiccating winds by wind breaks. It is a simple matter to provide wind breaks of *arhar* (*Cajanus indicus*) or other suitable crops in the cotton fields, and the point to be noted is that good American lint can be grown in the Punjab in

any year provided the crop receives proper attention. In this connection, it is of interest to know, that 4-F cotton, which made the growing of staple cotton possible in the Punjab, has been selected by the Sindh Cotton Committee as the basis of cotton work in Sindh

125 But the Agricultural Department is always looking out for improvements. Its method is to obtain new varieties not by breeding alone but mostly by selection. The actual varieties found in the fields are classified and then compared with each other by being planted in parallel adjacent strips. The new variety of American cotton denominated 285-F bids fair to oust 4-F from its place of pre-eminence. It is earlier, more drought resistant, and a higher yielder than 4-F. Three plants of 285-F will occupy the space required by two plants of 4-F. Owing to this and certain other peculiarities its good qualities have not yet been fully appreciated. But *samindars* who know how to grow it are making large profits out of the difference in cash returns per acre between it and 4-F. Private firms are stocking seeds of it, and getting premiums for these from *samindars* who have discovered its merits

126 Where an adequate water-supply is not available it is still more profitable to grow *desi* cotton than American cotton, and the Department still continues to supply selected *desi* seeds to those who require them. It is clear therefore that *desi* and American cottons must both continue to be grown in the Punjab, and it is equally clear to those who are acquainted with cotton business in the Punjab that these cottons are not mixed to any great extent in the fields or by the growers, but are deliberately mixed in the ginneries, thereby causing economic loss to the growers whose cottons are not valued so high as they should be in the world's markets, and further loss not only to the growers but also to the whole Province and to India. The seeds of the two varieties are becoming mixed and the crop is in consequence deteriorating. Punjab-American cotton has been more used in Europe during the last two years than formerly owing to the shortage of the American crop. This is no small gain in helping to stabilise the cultivation of cottons of better staple, but the whole future of the crop

is threatened by malpractices which are growing rapidly and will increase if not promptly dealt with.* The core of the trouble is that no accurate test is made of the economic value of cottons until they reach the spinning mill, and therefore cottons are sold largely on reputation. Consequently spinners in self defence must give a relatively much lower price for future consignments than pure Punjab-American cotton is really worth. This loss must finally come out of the farmers' pockets, and if the practice of mixing is persisted in, it may go far to wreck American cotton growing in the Punjab. In order to overcome this difficulty it is proposed to sell cotton on a certificate of quality. All the information required can be got from ordinary spinning mill machinery and simple laboratory tests.

127. In wheat also the new variety denominated Punjab 8-A has been selected, which gives an outturn of over two maunds greater than the previous selection of the Agricultural Department called Punjab 11. The question of wheat export still, however, gives rise to difficulties. Although India is one of the first class wheat exporting countries in the world (exporting about $\frac{3}{4}$ th of a million tons of wheat per annum) it exports its wheats under the conditions of a tenth rate country. The quality and therefore the final value of a consignment of Indian wheat exported to London is fixed in London and not in India as it ought to be. It shares this distinction with such backward countries as China and the Persian Gulf. In advanced countries like Australia and the United States of America the quality of the wheat is fixed for both sellers and buyers in the country of origin. This eliminates one of the most uncertain factors of the sale of produce, and enables exporters to give the producer a higher price for his wheat with safety to themselves. At present the exporter has to keep a considerable margin (about 1 per cent.) of the value of wheat in hand against the possibility of an adverse decision from London. This margin would not be necessary if the final decision as to the quality of the wheat were made in India. The money that would be saved thus to growers comes to many lakhs of rupees per annum (over 8 lakhs per annum with wheat at Rs. 4 per maund).

*Speech of the Vice President at the Meeting of the Indian Central Cotton Committee held on 6th September 1928, reported in the *Indian Trade Journal*.

128. It was to meet these problems that the grain elevator at Lyallpur was constructed. In the year 1922-23 about 30,000 maunds of wheat was stored in the elevator, but owing to the fall in prices those who stored wheat must have lost money. The elevator cannot, however, be expected to pay as a mere store-house. It is fitted with a very perfect grain-cleaning machinery, which removes practically all the galls, which cause the earcockle disease in wheat. But the main use of the elevator must be in the export trade, as one of a system of elevators in the country. A single elevator in the Punjab could never pay, but by shipping consignments of properly dressed and graded wheats from it to London information could be obtained as to what premium can be expected from elevator wheats, and this is an important item when attempting to work out whether an elevator system will pay. Hand samples of elevator wheats were valued on the London market in 1921 at about annas 4 per maund higher than the best *mandi* wheats (choice white Karachi). But it is essential to have a series of commercial consignments of properly cleaned and graded wheats sent to London in order to obtain reliable information on the premium to be expected. To get this information a scheme is under consideration to export about 30,000 tons of first class colony wheats at the rate of about 2,500 tons per month, and in parcels of about 500 to 1 000 tons at a time to minimise risks of loss through fluctuations in market price.

129. The experiments in threshing wheat by machinery, interrupted by the War, were resumed by the Punjab Agricultural Department at Lyallpur about three years ago, when two portable self-driven threshers were brought out from England. The conclusion arrived at as the result of experience with these machines is that, however satisfactory they may be when working under European conditions, they are unsuited to the dry climate of the Punjab where the straw of ripe grain will never be as tough as it is in England. For threshing operations in the Punjab it is held that the simpler and less complicated the machine the better chance it has of being successfully used. Moreover, the Punjab *zamindar* demands that the machine selected should be able to turn out threshed straw in the form of *bhusa*.* Experts who have

*Chaff used for fodder.

studied the experiments declare that of all the machines tried the full-size steam-driven machine producing *bhusa* still meets Punjab requirements better than any other.

130. As a sugarcane producing province, the Punjab ranks second in importance in India. The area annually under this crop varies between $4\frac{1}{2}$ and 5 lakhs of acres. This represents some 18 per cent. of the total area under sugarcane in British India. It is generally considered to be one of the best paying crops which the average cultivator grows, and its area is only limited by the amount of water available for irrigation. This at least holds good for canal and well-irrigated lands. So far as water requirements are concerned, it makes greater demands than any other crop, requiring during its growth in districts of slight rainfall some 12 to 15 irrigations as against four for wheat and five or six for cotton. In the canal colonies of the Punjab, the average cultivator puts one acre per square (of about 25 acres) of his land, under sugarcane. From this area he eventually gets about 30 maunds of *gur* (crude, unrefined sugar) which is the form in which he usually disposes of this crop. But with better varieties of cane which contain a higher percentage of juice, yields of 80 to 90 maunds of *gur* are being obtained. These varieties are just beginning to be taken up by the zamindar. The fuel which he will require to evaporate the cane juice will thus be proportionately greater than he at present needs with his local canes. These higher yielding canes cannot, indeed, produce sufficient fuel for the evaporation of their own juice. Moreover the destruction as fuel of the large mass of foliage provided by the crop is highly uneconomic, as these leaves contain a large part of the plant food which the crop has removed from the soil, and are therefore valuable as manure. These difficulties are being met by the Agricultural Department, which has designed furnaces whose simplicity of design renders them suitable for use by the ordinary zamindar, by means of which both the fuel consumption and the time expended in evaporation can be reduced by one half.†

131. These are only examples of the work which is done by the Agricultural Department. Apart from this new agricultural implements are being designed suited to the country.

Other activities of
the Agricultural
Department

†See 1921-22 Report I, 323.

†Stewart and Khazak Singh in the *Agricultural Journal of India*, November 1923.

Well boring to increase water-supply in existing ordinary wells is becoming very popular, and the services of departmental borers are in very great demand. Proposals to put these operations on a self-supporting basis are now on foot. The possibilities of subsidiary industries, such as poultry, fruit growing and dairying are being investigated. Improved varieties of potatoes introduced by the Department in the Simla Hills gave a profit of Rs 177 per acre over the local variety. These are a few instances of the way in which the Agricultural Department is developing the predominant industry of the Province

132. The Co-operative Department no longer confines itself to the provision of rural credit. It includes in its investigations all the problems that arise from the application of economics to agriculture. In collaboration with the Standing Board of Economic Enquiry (Rural Section) and the Agricultural and Veterinary Departments on the one hand and the actual cultivator on the other, it conducts investigations into all matters affecting the welfare of agriculturists. It endeavours to arrive at general principles and to apply them in practice. A generous attribute to the work done was paid by the President of the Indian Economic Association, which held its annual conference in Lahore in January 1923, when he congratulated Mr. Calvert* on having founded a school of Rural Economics in the Punjab.

133. The object of the Co-operative Department is indeed to examine the whole economic structure of the Province, to study the defects which retard economic progress, and to discover the factors which contribute to the comparatively low standard of prosperity. The mere reduction of indebtedness and the provision of cheap credit are not its objects, but its aim is the provision of sound, well controlled credit for productive purposes and the replacement of unproductive debt by productive borrowing. Mr. Darling† has conducted an enquiry into the rural debt of the Province and has arrived at the conclusion that it amounts to no less than 56 crores, nearly all of which is unproductive debt. Mr. Calvert* has pointed out that there is a great waste of female labour in the Province which is primarily

*Registrar, Co-operative Societies.

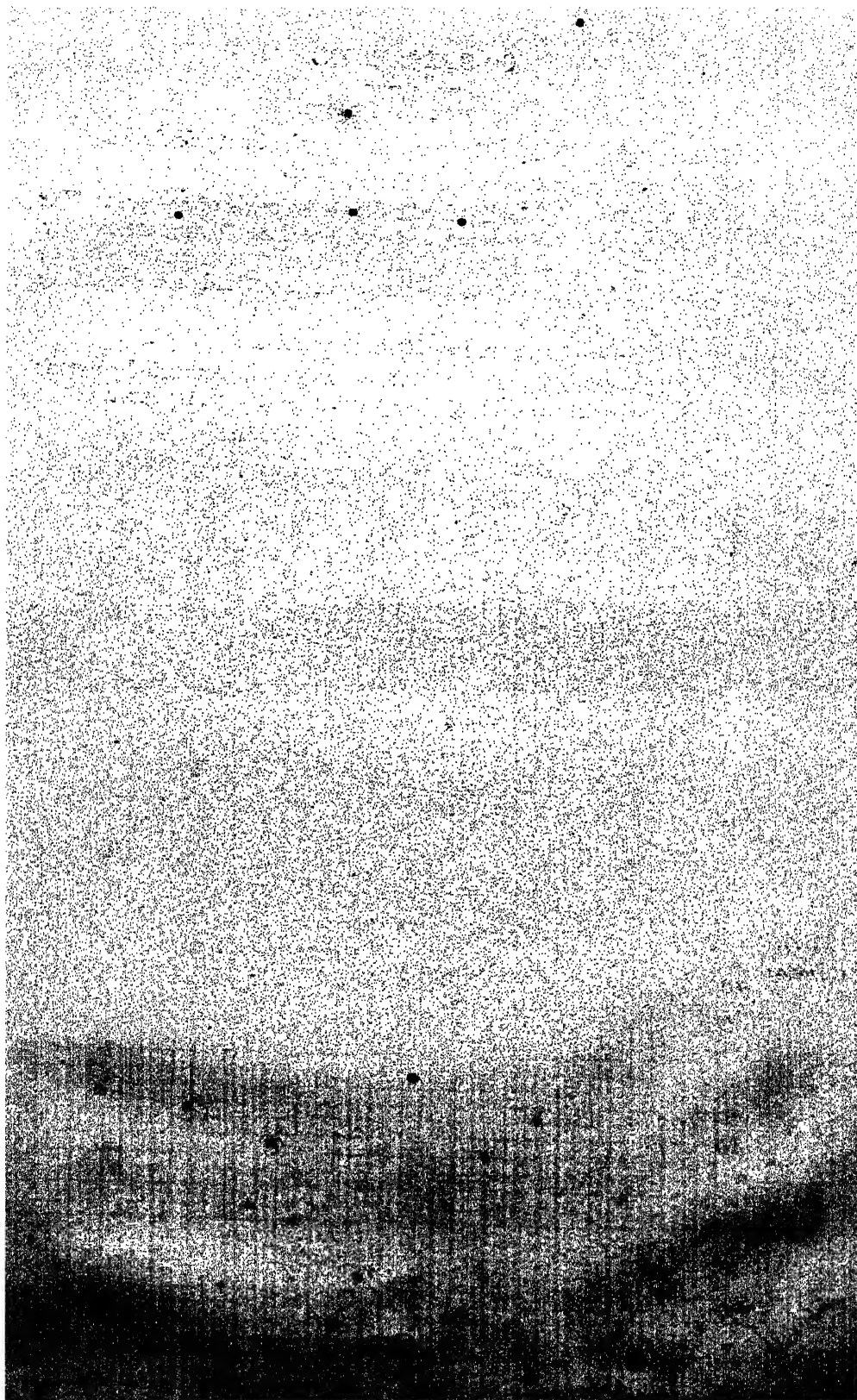
† Who left the Co-operative for the Income-Tax Department in 1921.

due to custom and prejudice. If there were in Western countries a movement aiming at the exclusion of female labour from all except purely domestic tasks, that movement would endanger the whole economic fabric, and if successful it would involve those countries in ruin. The fact that there are tribes in the Punjab which do not allow their womenfolk even to work in the fields is alone sufficient to explain their poverty. No European country could maintain its existing standard of living without the assistance derived from female labour. He has also drawn attention to the disadvantage of a judicial system under which loans advanced for productive agricultural purposes rank in the Courts on a par with loans advanced for extravagances like litigation, drink and costly marriages. The Co-operative Department is endeavouring to enable the indebted agriculturist to obtain relief through the Usurious Loans Act which has upto now remained practically a dead letter. In the case of Consolidation of Holdings investigation has already passed from the stage of theory to that of achievement; and the work which has been done in uniting the scattered strips of cultivation of the land owners in a central Punjab village has attracted the attention of economists over all India.

134. These are only a few instances of the lines on which research proceeds. The co-operative literature of the world is ransacked in order to find new possibilities of co-operative practice, which may be applicable to the Punjab. Their practical value for this Province used to be discussed in annual Staff Refreshment courses which unfortunately had to be abandoned this year owing to limitation of funds. The extent to which these ideas have filtered down even to the uneducated co-operator is sufficiently demonstrated by the intelligence shown by the latter in Society meetings. The suggestions made have always a practical value and the carping criticism that too often characterises more educated bodies is conspicuous by its absence. The present system of Education has been mainly devised to suit urban requirements and the Co-operative and Educational Departments are now collaborating with a view to evolving a system more

"Table" "Wealth and Welfare of the Punjab" which has revolutionised Indian economic thought on rural problems.

They called because they "refreshed" the staff's knowledge of Co-operative theory and practice.



CO-OPERATION.

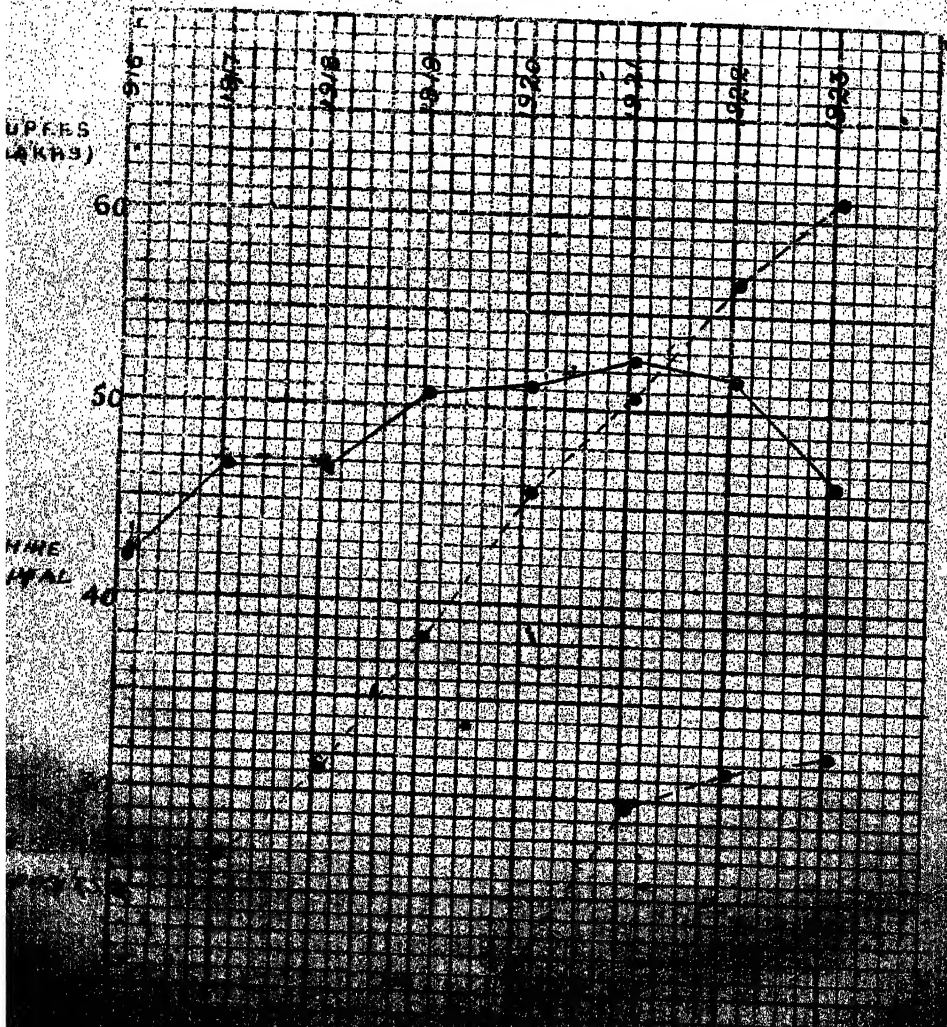
GROWTH OF THRIFT.

Showing share Capital Reserve and Deposits in Agricultural Societies from 1916-1928.

NOTE 1.—Deposits declined in 1918 at the crisis of the great War owing to counter attraction of war loan; rose rapidly in succeeding years; nearly stationary during last two years owing to lack of funds for extending movement.

2.—Steady growth of Reserve Funds.

3.—Rise in share capital as movement extended; recent decline owing to repayments after 10 years.



suited to the needs of agriculturists. Agriculturists are loth to send their children to a school, which will transform them from healthy lads into luxurious *babus*, but the grown-up agriculturist realizes only too well the handicap which he suffers from illiteracy. Adult education for agriculturists would have the advantage of removing the illiteracy without rendering them scholars useless for work in the field. On its own initiative the Co-operative Department has made a beginning in this matter, and the interest shown by the Educational Department should do much to facilitate the spread of the experiment (*para.* 73).

135. Co-operation was originally introduced into India in order to provide capital for agriculture, but it soon became clear that what was wanted was not so much capital as lessons in the wise use of it. There are few things more important for the economic welfare of the masses than the encouragement of thrift and still fewer which receive so little attention. Co-operative Societies now place the encouragement of thrift amongst their objects and render valuable service by the collection of small shares, by receiving deposits, and by attempting to induce members to make compulsory deposits for special purposes. The success which has been obtained is shown by the accompanying graph, which relates only to village societies and takes no account of the amounts which have been accumulated by the moneyed classes in Central Banks. These deposits consist almost entirely of small sums given by a large number of individuals. The rate of increase during the last two years has been somewhat less than previously owing to the restriction in activities which limitation of funds has necessitated. The recent decline in share capital is due to the fact that many societies have now come under the rule by which share capital is returnable after ten years, but the steady increase in the reserve fund is itself a sufficient testimony both to the growing financial stability of the societies and to a form of thrift which is none the less real, because it is hardly felt by those who practise it. But for those persons who do not wish to borrow and are not attracted by any of the various types in which thrift is a secondary object, the special thrift and saving society is being organized. Such societies are classed as non-agricultural, which means that the members are not dependent upon agriculture; most are

organised amongst *mutuals*, on the tahsil or District Board staff. Members are on the increase and the monthly contribution decided upon at the start is being raised. With a little help from Government in making the deductions from the monthly pay as is done in the case of Provident Fund contributions, these societies should prove very popular among minor officials.

136 The following statement will give a general idea of the year's working —

Class	SOCIETY ON 31ST MARCH			YEARNLY TOTAL (THOUSANDS)			WORKING CAPITAL (LAKHS)		
	1921	1922	1923	1921	1922	1923	1921	1922	1923
Total	98	110	11	9	10	12	1.5	1.6	1.89
Agricultural	757	8,620	8,853	2,13	2.09	2.23	2,15	2,50	2,64
Non-Agricultural	803	401	414	15	15	19	9	12	17
Central non-credit	110	187	124	2	2	2	3	3	4
Total	5,415	12.8	15,37	2,36	2.09	2,56	3.61	4,31	4.73

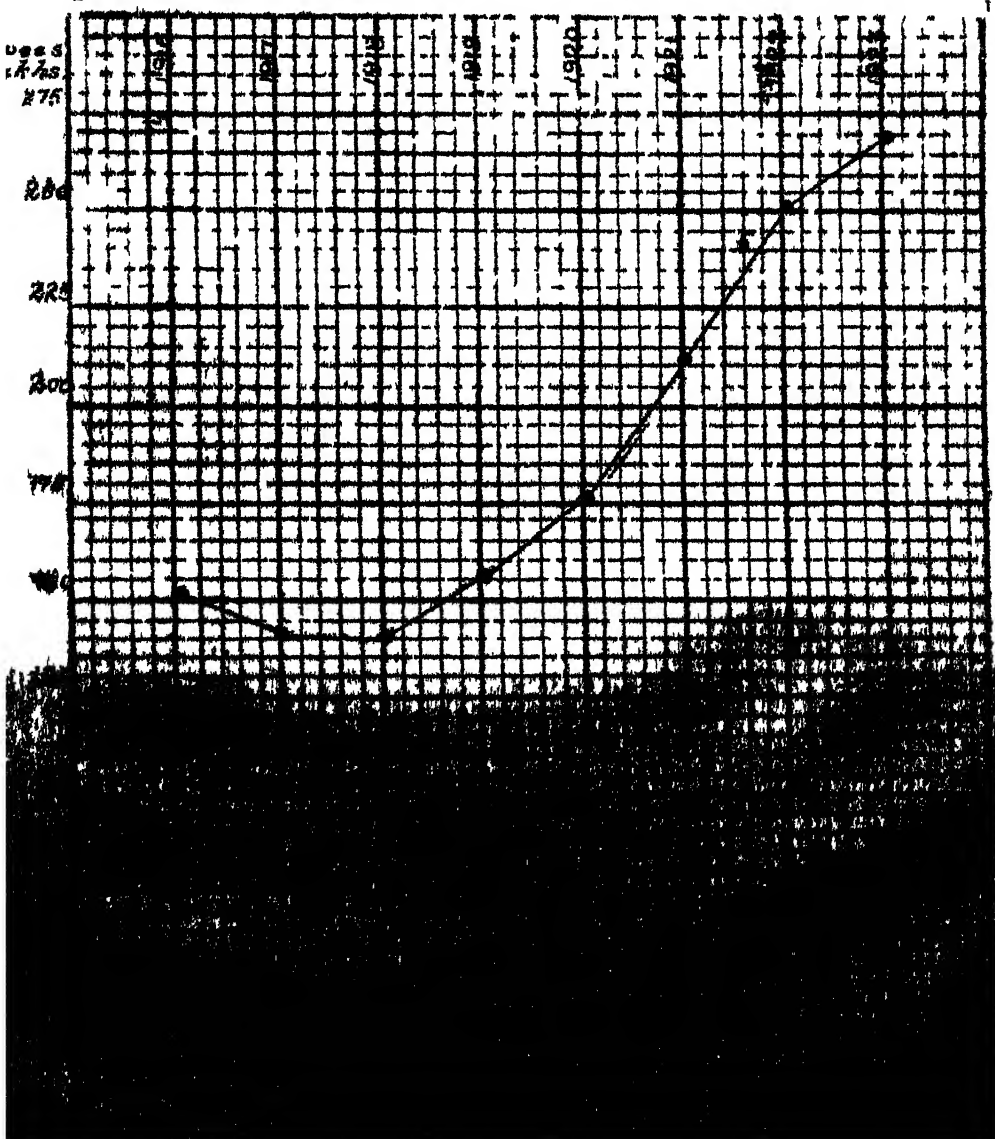
The last three years have been marked by many discouraging features, the financial condition of the Province has served to prevent the allotment of funds sufficient to maintain an adequate staff. In the field, work has been seriously affected by the severe drought and fodder famine of 1920-21. This ended in good rains leading to a big demand for loans, but the succeeding cotton crop proved disappointing and when a good *rabi* was harvested the prohibition of export served to restrict buying by the big dealers. Prices fell sharply and much of the grain was left unsold and almost unsaleable in the hands of the cultivators. During the year 1922-23 there was at one time promise of an excellent spring harvest, but untimely rain, rust, wide-spread hailstorms, and a further fall in prices combined to cause serious economic trouble to the cultivating classes. In 1922 many cultivators held up their wheat partly in the hope of getting better prices, and partly because, in a falling market, there

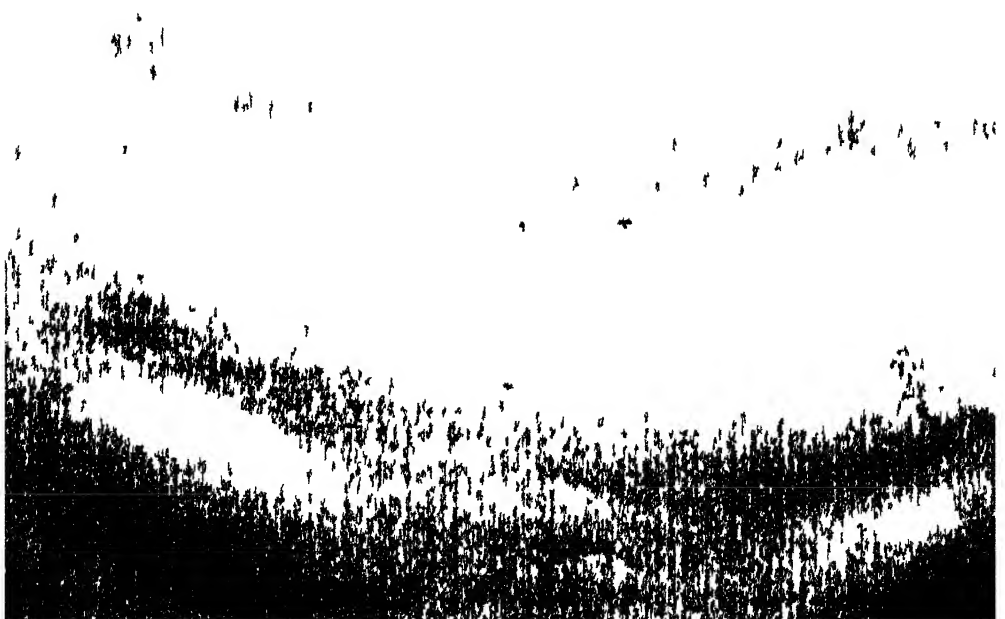
CO-OPERATION. AGRICULTURAL SOCIETIES.

Working Capital.

Composed of (1) deposits (2) shares; (3) reserve and profits;
(4) loans from Central Banks.

NOTE.—Stationary during the war; rapid increase subsequently;
rate of increase diminished last year owing to lack of
funds for extending movement.





were few buyers. In 1923 these conditions were accentuated and wheat was almost unsaleable as big dealers would only buy for immediate re-sale and not for storage. Prices of food-grains fell to almost pre-War level but those of cloth and other necessities of a cultivator's existence did not decline in proportion.

137. Consequently except in a few outlying districts Measures taken to meet difficulties attention was devoted rather to the improvement and consolidation of existing societies than to the starting of new ones. In view of restricted Government support much of the junior inspecting staff is now paid by co-operators themselves through the Punjab Co-operative Union, a body which represents all co-operators of the Province. Owing to its enthusiasm for extension this body got heavily into debt, but restricted activities and a voluntary subscription, amounting to half a lakh, enabled it to balance its budget. An additional source of income was also obtained from the interest on balances at credit after the liquidation of societies which have been closed.

138. The Co-operative Department, this great agency (Government aid to Co operation. The Jhang Mortgage Bank. for the regeneration of the rural class, is carried on at a cost to Government of only Rs. 4½ lakhs a year, little more than half the amount spent on the development of industries (*para. 87*). Agriculturists are indeed apt to compare their own self-help with the generous grants made for sanitary purposes, water-supply and other objects in urban areas, and inquire why the agriculturist alone is singled out for the policy of "no Government aid". Government has, however, made an advance of about Rs. 1 lakh to finance the Jhang Mortgage Bank, a tiny experiment in a branch of rural credit which has hardly yet been touched by Co-operation in India. The ordinary village society is only in a position to finance loans for ordinary agricultural operations, which can be repaid within a year or two; but for the repayment of the heavy mortgage debt of the Province, and the financing of big schemes of agricultural expansion, longer term credits are required; and it is difficult to see how the money can be available without an advance from Government similar to that which has been made in other countries where mortgage banks have been instituted.

139. The financial position of the movement can be Co-operative Capital. gauged from the accompanying statement:—

Co-operative Capital—(Rs. lakhs).

	Deposits.	Shares.	Reserve and profits	Total.
Primary Societies	41	57	69	1,60
Secondary Societies (Central Banks, &c.)	1,69	7	7	1,23
Total ..	1,50	57	76	2,63

Thus the co-operative movement is backed by a total capital of nearly Rs. 3 crores : 10 per cent. of this or Rs. 30 lakhs, is in fluid resources immediately available on demand ; half in cash and the other half in Government paper, on which a cash advance can always be obtained from the Imperial Bank. These figures show what progress has been made towards placing the movement on a sound financial basis. The Central Banks are steadily gaining the confidence of the investing public. They are year by year becoming stronger by the building up of reserves, to which the new rule of limiting dividends to 10 per cent. should contribute. The courageous action of the Lahore Central Bank in writing off Rs. 23,000 from its assets owing to depreciation in the value of investments shews what care is taken that balance sheets shall accurately represent the financial position of these institutions.

140. The increase in the capital of both village societies and Central Banks has brought a new problem into existence. Some 800 societies now provide their own capital and some Central Banks have more money than is necessary for financing the societies of their districts. These surplus funds are allotted by the Co-operative Union to less prosperous Central Banks. The method is a clumsy one and it is to put it on a more systematic footing than a Provincial Co-operative Bank has been proposed. By pooling their fluid resources in the Provincial Bank, Central Banks will be in a position to obtain more credit than at present. The Provincial Bank will also be in a position to deal directly with the headquarters of the Imperial Bank, into which it can pour its surplus resources when they are not wanted, and from which it can draw in time of need. By the issue of debentures it may be also in a position to finance long term credit and so to fulfil the functions of the Mortgage Bank which is so urgently required (*para. 138*).

141. The Lyallpur Co-operative Commission Sale Shops are attempting to solve a problem which is assuming world-wide importance. Many of the difficulties they have had to face have been met with in other countries, and the main principles underlying their working are governed by the same fundamental economic laws as obtain elsewhere. The problem set for them to solve is that of marketing. The main difficulty to be overcome is one of finance. Some form of financial arrangement is inevitable owing to the time between the delivery by the farmer and the recovery of the price by the retailer. But in Lyallpur the problem is still further complicated by the fact that many of the zamindars are heavily indebted. The debts incurred are almost entirely non-productive and are heaviest in the most prosperous districts, in which money-lenders congregate as flies over jam. But the debt is the result and not the cause of prosperity. The indebtedness of the small-holder to the village money-lender is being steadily removed by the local village co-operative society. But the experience of the Commission Shops is disclosing that indebtedness is not confined to the small-holder. Big land-owners, with every outward sign of prosperity, are often heavily indebted to the *ahrtis* (commission agents) of the *mandi* (markets), who spare no pains to entangle them into permanent indebtedness. This indebtedness is generally unsuspected by the outside world, but its existence would explain the neglect of many of the larger zamindars to assist the co-operative movement. A debtor is the slave of his creditor, he is no longer a free man.

142. An important result of his indebtedness was the control by the *ahrti* of the crop supply.
 Advance on grain. The big landholders, who borrowed from him direct, were compelled to bring their crops to him after harvesting. The small-holders, who dealt with the local moneylender, brought their crops to the latter, and he forwarded them on to the *ahrti* on whom he also was dependent. The value of the crops harvested was credited to the zamindars at the price then prevailing, a price which was necessarily low owing to all the produce being thrown on the market at the same time. Once the produce had all come in the price rose, and the *ahrti* reaped a rich reward. It was, therefore, discovered that it was useless to tackle many of

the finer and more interesting problems of marketing until this elementary, though formidable, difficulty had been removed. The question was handled by the local Co-operative Inspectors and the Lyallpur Central Co-operative Bank with characteristic courage and resource. One of the zamindars' chief difficulties lay in the necessity for immediate sale of their produce at artificially low prices. This was met by the Commission Shops arranging to advance 75 per cent. of its value on all grain brought in whether sold or not. When the zamindar wished to store, the shop made arrangements for his doing so. Such advances were fully secured by the produce held, and the Central Bank could safely make advances to the Commission Shops on the grain held by them for the zamindars. The success of these institutions may be judged from the fact that while sales totalled Rs. 4 lakhs in 1921-22, in 1922-23 they amounted to no less than Rs. 29½ lakhs.

143. Co-operative sale is, therefore, the necessary culmination of co-operative credit. To repay his loans to the village credit society the zamindar must sell his produce, and, without co-operative sale, he is compelled to resort to the only alternative, a broker, who is also a moneylender. Thus the village society does not completely relieve its clients. Of great, though less importance, is the financial simplicity introduced by the shops which can relieve the village societies of half their work and responsibility. It is therefore hardly too much to say that while the village credit society is the base, the sale shop is the superstructure of the co-operative edifice.

144. The movement for the consolidation of fragmented holdings* is gaining strength and popularity. Generally speaking, propaganda work has been confined to the Central Punjab, where fragmentation has become a serious evil, particularly in the Jullundur District. There are, however, a few scattered cases of consolidation elsewhere. The chief progress has, however, been made in the central districts of Gurdaspur, Hoshiarpur and Jullundur. In Gurdaspur seven new societies were registered during the year 1922-23; in these, 468 acres comprising 555 blocks have been consolidated into 96 blocks, the average area per block has thus

*See 1921-22 Report I, 235 foll.

increased from 184 acres to 487 acres. Some interesting results may be mentioned : in one village, consolidated last year, the rent of the area treated is reported to have risen from Rs. 500 to Rs. 1,000. In two other villages rents on the consolidated areas are said to have risen 25 per cent. Eight new wells have been sunk in three villages ; in one, 62 acres of old waste has come under cultivation as a result of re-adjustment ; in another a long boundary dispute between Sikhs and Mussalmans has been settled by so consolidating the land as to give each party a separate parcel. In a village in the Jullundur district one owner who previously had his land in 200 different places, has now consolidated it into one block. It is only when the details are examined that the immense burden imposed upon these small cultivators by fragmentation is realised. The task of trying to administer an agricultural holding scattered in even 40 different places must be beyond the limit of efficient accomplishment. In the Jullundur District 47 new wells have been sunk in the consolidated area : the Central Bank, Jullundur, and Madar Credit Union have sanctioned a proposal to lend money for these wells at a reduced rate of interest, and already about Rs. 20,000 have been advanced. It is claimed that as a result of repartition, 1,750 acres of waste has been brought under cultivation ; this was previously in tiny scattered plots unsuitable for ploughing. Another gain is that by re-adjustment an owner's land can be collected round his well, so that the actual area irrigated is increased. Wherever possible, access has been given to wells and fields by pathways, so as to avoid quarrels. To prevent unnecessary delay in mutation of repartition, revenue officers have been directed to give immediate attention to mutations embodying schemes of consolidation. A more serious difficulty arises from the law of succession to occupancy rights embodied in section 59 of the Tenancy Act : the proviso to clause (c) requires that in order to succeed in the case dealt with it must be proved that the common ancestor occupied the land. Obviously, a break of occupancy due to consolidation would deprive male collateral relatives, descended from the common ancestor, of the succession. Legislation will probably be needed to remove this obstacle.

145. Valuable information as to the condition of Punjab cattle was obtained from the cattle census held in February 1923. The practice of holding a quinquennial cattle census

had prevailed in the Punjab since 1898, but scientific interest in the matter was greatly stimulated by certain resolutions passed by the General Assembly of the International Institute of Agriculture at Rome in 1913. Attention was drawn to the value of a standardised classification and this led the Government of India to formulate the principles under which an all-India cattle census could be undertaken every five years. It was intended that the various provincial censuses should synchronise, but the War led to some dislocation. Previous Punjab censuses had been held in 1904, 1909, 1914, but the next one did not take place till 1920. The circumstances of that year were, however, exceptional. A series of bad seasons, combined with large exports for military purposes, had led to a considerable reduction in numbers. It was thought desirable to repeat the census when more normal conditions had supervened, and accordingly the present census was held in February 1923.

146. Except in the case of large towns, where special arrangements were made by Deputy Commissioners, the census was carried out by *patwaris*,* under the supervision of the superior Land Revenue staff. This agency is well fitted for the purpose, but the carrying out of a census of this kind is a complicated matter, and the meticulous accuracy of a human population census cannot be expected. But for the purpose for which the census was intended, *viz.*, the investigation of the broad statistical tendencies of the cattle population, the results are more than sufficiently accurate.

147. A numerical comparison between the recent and previous cattle censuses may be obtained from the following abstract :—

(Millions).

Year	Cows.	Cow-buffaloes.	Bulls, bullocks.	Male buffaloes.	Young stock.	Total cattle.	Sheep.	Goats.
1904	3.0	1.9	4.1	.6	3.7	13.3	4.1	5.5
1909	3.4	2.2	4.2	.6	3.8	14.2	4.8	4.2
1914	3.7	2.6	4.6	.6	4.0	15.5	4.7	4.4
1920†	3.0	2.7	4.3	.5	3.8	14.3	4.0	3.1
1923†	3.0	2.9	4.5	.5	4.0	14.9	4.1	4.2

† See 1921-22 Report I, 269.

† The cattle figures for 1920 and 1923 have been modified so as to make the proportion of young stock in those years similar to that of previous years. This is explained fully in paragraph 7 of the Cattle Census Report.

The figures do not justify any pessimism as to the numbers of the cattle population. The increase between 1904 and 1914 coincides with the increased demand for milking and plough cattle created by the development of the Canal Colonies. The check in 1920 was, as has been already explained (*para.* 145), due to exceptional causes, and the last census indicates a rally. The increased demand for milk has led to a steady increase in the number of cow-buffaloes, an increase which continued even during the unfavourable census of 1920. The diminution in the number of bullocks in 1920 was almost negligible, and 1923 has brought them well up to near the 1914 maximum. The diminution in the number of cows might appear more serious, but as will be shewn there is no reason to suppose that the numbers are inadequate for breeding bullocks for the plough. Their value as milk producers is at present only secondary, and the increase in the number of cow-buffaloes would seem to secure the milk supply. There would be no cause for alarm as to the quantity of cattle, if it could be assumed that the quality was up to the standard required.

148. But this is a large assumption. The gradual advance of canal irrigation into the grazing-grounds of the best breeding stocks; the draining away of the best cows and cow-buffaloes to provide milk for the towns, while inferior animals are left to carry on the breed; the existence of large numbers of half-starved cattle, which compete successfully with the more useful animals for the ever diminishing supply of available fodder; the fact that cattle breeding is not a commercial proposition either actually, and still less when compared with the large profits to be obtained from agriculture in the strict sense of the word: all these causes have tended to retard progress. It is indeed a matter of common observation that a large majority of the cows in existence are neither good milkers nor good breeders, and that a large number of bullocks are not efficient ploughers. Lack of quality rather than quantity seems to be the chief danger at the present time. Consequently a census which makes no distinction between cows fit for milking purposes, and cows which can only suckle their young, and between bullocks fit for ploughing and other bullocks, fails to deal with one of the most important problems which face the agriculturist of the Punjab to-day.

149. The main object of Punjab cattle breeding is the plough bullock, and if numbers alone were considered there would be little to fear. The average sown area for the last ten years is 24 million acres, and it is necessary that the number of bullocks (and male buffaloes) should be maintained at the quantity necessary to plough this. The average area is taken rather than the area sown in particular years as the number of plough cattle must be maintained up to the average standard. Clearly were the number of bullocks reduced proportionately to the sown area in a bad season there would be insufficient for the next year's ploughing. The following figures illustrate the position :—

Year.	Bullocks and male buffaloes (millions).	Number per 100 acres, average area.	Ploughs (millions).	Ploughs per 100 acres.
1909	4.9	20	2.2	9
1914	5.1	21	2.3	10
1920	4.8	20	2.2	9
1923	5.0	21	2.3	10

Thus for every ten acres there is a yoke of bullocks and about one plough, which would on the face of it be more than ample. But an indefinite number of bullocks must be deducted as not really up to useful work. Moreover, the size of bullocks varies greatly, in the hills they are hardly larger than goats. Bullocks and male buffaloes are also used for transport purposes, and the 3 million carts in the Province require 6 million cattle to pull them. But such animals are generally used for ploughing also and need not therefore be subtracted from the plough power of the Province. As far as numbers go, the plough power is therefore adequate. Camels are also used for ploughing in some of the sandy tracts of the Province, but hardly sufficiently to affect the figures.

150. The diminishing number of cows combined with the slow increase in the number of cow-buffaloes illustrates an increasing tendency from the well-known breeding areas

rather than to breed them at home. As grazing grounds get more restricted with the extension of canal irrigation, it is more and more found profitable to keep cow-buffaloes, which are better stall feeders than cows, for milk, and to abandon the use of the cow which is then mainly used for bullock breeding. The resultant tendency to specialization in breeding obviously throws an increasing strain on the good breeding grounds to maintain an increased supply, at a time when the size of even these specialized areas is being diminished.

151. At an annual cost of 14 lakhs, of which 8 lakhs are provided by the Province and 6 lakhs by local bodies, the Veterinary Department is tackling these problems with courage and success. Under a scheme to maintain and improve the valuable Hariana and Dhanni breeds of cattle Government will give grants for selected bulls, on condition that the District Boards of the districts to which they are sent grant an equal amount. This scheme is the first serious effort towards the development of the Hariana tract as a cattle breeding centre ; and as a business proposition should commend itself to the attention of Government. The new irrigation works now in course of construction will increase considerably the area of cultivable land in the Province for which plough bullocks will be required in large numbers. The importance therefore of developing the Dhanni and Hariana cattle breeding tracts to meet the requirements of the rest of the Province will readily be admitted. Since the majority of the present irrigated districts are not by any means self-supporting as regards the plough bullocks they need, they are dependent on such tracts for the superior type of bullocks which are available there. This source of supply needs therefore to be encouraged in localities where the cattle breeding industry can for economical reasons prove most remunerative to breeders.

152. The starting of Co-operative Cattle Breeding Societies by the Co-operative Department in the Rawalpindi Division is particularly opportune and should be of considerable help towards the success of the scheme in that area. There are now 19 cattle breeding societies with about 700 animals purchased from Hissar. Members bind themselves to confine covering to bulls selected for their pedigree qualities. Steps

Cattle-breeding
Societies and grants.

are also being taken to restore the valuable milk producing breed of the Montgomery District by leasing Government land to grantees on cattle breeding terms. When the scheme has made some progress it should be possible to organise a big milk supply out of this area. Other herds are also being brought under the milk test, and it is hoped that with proper care the Hissar breed may improve in the matter of milk yield without any danger of reducing the value of the progeny as plough animals. Pedigree herds of the Hissar breed are being maintained in the Government Cattle Farm, Hissar, and on the three Hissar cattle grants in the Lower Bari Doab Canal Colony. Their main function is to provide pedigree bulls for distribution in the districts for breeding purposes. Two hundred and fifty-six bulls have been supplied this year at concession rates to the districts.

153. The Hissar breed is being developed by the Hissar Cattle Farm whose main function is to provide high class bulls of this breed to the people of the Province. It is the only source from which bulls can be obtained, which will maintain or improve this important breed of cattle. The farm also supplies a few Montgomery bulls to District Boards; its surplus heifers to cattle-breeding societies, private breeders and Indian States; donkey stallions to District Boards for breeding purposes; merino rams for the improvement of sheep breeding; bullocks and mules to the Military Department and others. Its area is 40,000 acres, of which only 2,000 acres are irrigated. Every effort is made to maintain a sufficient fodder reserve against famine. In December 1923, reserve fodder amounted to well over a lakh of maunds and is larger now than at any time since the Civil Veterinary Department took the Farm over in 1899.

154. The number of male buffaloes in the Province and remains nearly constant. Practically only those zamindars use male buffaloes who find it too costly to purchase bullocks. The sluggish nature of the buffalo, its inability to endure heat, and its desire for water, all render it extremely unsuitable for a hot dry climate like that of the Punjab. Against this, however, must be set the fact that it is docile, intelligent, and, if not feeling the heat, a steady worker. Possibly a harder type might be obtained by importing bulls from the drier tracts. But the present type of the dual purpose buffalo are sufficient

remote to render the expenditure of energy in this direction inadvisable. Most authorities hold that the cow is a more profitable dual-purpose animal for official endeavour. Moreover, the popularity of the cow-buffalo alone will secure that buffalo breeding is not neglected. Actually the present tendency seems to be towards the cow-buffalo for milk, together with bullocks of the well-known breeds for ploughing, male buffaloes being used as a stop-gap. Religious feelings are not aroused so strongly by the buffalo as by the ox, and consequently male buffaloes can be easier made away with than steers. Selective breeding of buffaloes is therefore easier for religious zamindars, who can keep the best stock for breeding purposes, and eliminate the rest. For all these reasons there seems no such reason to anticipate deterioration in the breed of buffaloes.

155. The popularity of the cow-buffalo is greatest in the canal colonies, and to a less degree in all districts where grazing is limited, and the value of the land for other purposes is so great as to render its allocation to fodder purposes unprofitable. It stands the stall-feeding, which is unavoidable in highly cultivated areas, better than the cow. The ratio of milk produced to fodder consumed is considerably greater than that of the cow. The milk is moreover richer in fat, and therefore will stand adulteration better, a quality which unfortunately gives it a better sale value. As a milk producer only, therefore, the cow-buffalo is a better commercial proposition than the cow.

156. On the whole the rural milk supply is fairly satisfactory, and the average yield per annum of good Punjab breeds such as Hansi or Montgomery (2,500 lbs., *i.e.*, an average of 3½ seers daily throughout the year) and of south-east Punjab buffaloes (4,000 lbs. or 5½ seers daily) compares favourably with that of the United Provinces breeds, Mewati (2,000 lbs.), Kherigarh (500 lbs.), and buffaloes (2,500 lbs.). But the corresponding yield of average English cattle (Shorthorn or Friesian), *viz.*, 7,200 lbs. or 10 seers daily causes food for thought. The larger annual output of English cattle is due to a longer period of lactation as well as a larger daily yield. There is no doubt that cows and buffaloes in India give far less milk than is given by any cow whose existence would be tolerated in Europe. In Europe that cow is

selected which will give the maximum milk for a given amount of fodder. In India the cow is generally given the minimum quantity of fodder, which will enable it to give a minimum quantity of milk.

157. The rural milk supply is nevertheless fairly satisfactory. But the very prosperity of the agricultural classes is making it more and more difficult for an adequate supply to be provided for the towns. For these the present system is that provided by *gwalas*. They maintain their herds within the town precincts, where they purchase fodder for their maintenance, or drive them to the nearest grazing-grounds often causing damage to the land through which they pass. They are generally in debt to the local *bania*, and consequently are not in a position to feed their cattle well. They have just enough to keep themselves and the cattle alive, and the *bania* appropriates the rest. The advantage of good finance is apparent from the change produced in the milk production of the *gwalas* of Lyallpur after forming themselves into a Co-operative Society. Their cattle were better fed, and the quality and outturn of milk were improved. No scheme for urban milk supply will be adequate which does not take account of the financial aspect.

158. The present methods are, however, fairly satisfactory in relatively small towns like Lyallpur. In large cities like Lahore and Amritsar, the system breaks down completely. By keeping a large number of animals in a densely populated area sanitary problems are rendered more difficult, and there is a danger of milk contamination by pathogenic bacteria. Fodder has to be purchased at prices enhanced not only by the cost of transport and storage, but often by the artificial addition of octroi. These expenses drive up the price of milk and often force the *gwalla* to feed his cattle on foul horse litter. The animals are kept in unnatural conditions which react unfavourably on their health. It is unprofitable to rear the calves born under these conditions, and they are often released as Brahmini bulls to feed at the public expense, and to beget in sorrow a still more unprofitable offspring. Much of the manure produced by the city herds remains to poison the city instead of enriching the fields where it is needed, thus gradually depriving the land of necessary chemical constituents. The limited supply of

milk is acquired by the richer inhabitants, leaving the children of the poor to starve without a necessary article of diet. Owing to the insanitary conditions at least 25 per cent. of the cows in the city only give enough milk to rear their calf, and another 30 per cent. will only give 1 to 1½ seers a day besides rearing their calf.

159. This kind of system was once in force in England, but disappeared as the result of effective arrangements for the transport of milk. Transport organization necessary. The high price of milk in cities shews that there is a large demand for milk, primarily for quantity, and only secondarily for quality. Not infrequently milk will be selling at 3-4 seers in the city, when a few miles outside it will fetch from 8 to even 12 seers only. Organization of transport will alone solve this problem, and there is ample margin between the cost in the districts within transportable distance and the cost in the city to cover the cost of organized transport. There is no reason why milk from the fodder areas should not be pasteurised and sent into the big cities by refrigerating vans in the 'milk train,' or by refrigerating motor vans on the road. It is all a matter of organization, which offer ample opportunity to the energy and capacity of the great reformed municipalities. It should also provide the *zamindar* with a valuable side industry as a supplement to crop-growing. One of the weak points of Indian, as compared with European, agriculture is the lack of side industries to fill up the spare time of the agriculturist.

160. Cattle owners are, however, often indebted, and tend to regard their stock rather as security for advances from the money-lender than as a capital from which they can make profits by breeding. Cattle-breeding as a subsidiary industry. The use of cattle as a form of moveable capital is in fact a characteristic of all primitive communities, a fact to which the kindred origin of the words "cattle" and "capital," and the derivation of the word "pecuniary" bear testimony.* The breeding and rearing of live-stock would form an admirable subsidiary industry to the agriculture of those parts, providing an occupation and income in slack seasons, and returning to the soil the manure necessary to keep in a high state of fertility. The great English pedigree stocks have owed much

to the social prestige which has, since the eighteenth century, attached to the possession of prize animals, and advance along these lines might provide an interesting occupation for the large land-owners of suitable areas in the Punjab.

1. But the question of breeding largely resolves itself into one of fodder. The old grazing areas are largely disappearing as the result of the extension of cultivation, mainly due to irrigation, but also noticeable in well-irrigated, or the better districts. The following figures are suggestive --

	(1)	(2)	(3)	(4)
H...	...	...	4	...
I...	...	...	17	...
K...	46	...	57	...
Jullundur	1	...	12	...
S...	...	...	18	...
P...	11	...	174	...
...	...	...	...	1

On the whole the situation appears better than that of the United Provinces, though much of the culturable area of the Punjab is only of grazing value after rains. But in congested districts like Jullundur the fodder question is already acute a fact which appears only too clearly when the figures are compared with those of England, and the quality of English grazing is compared with that of such districts on the average all the year round. It is only by the encouragement of fodder crops that the effects of the continual restriction of grazing can be combated. The real problem arises in May and June when all grazing-grounds dry up. It has been suggested that the situation at that time might be eased by allowing canal water for fodder crops at that time at nominal rates, that being the time when it is least wanted for commercial crops. The introduction of ensilage might also do much to relieve the situation.

162 The first of these is greatly aggravated by the fact that the large numbers of cattle which are daily taken consumers to do not pay their way either as ploughmen, milk producers or breeders. At the same time, after a shortage unless man intervenes the animal tends to survive which has the effect of increasing the population and so the number of animals which are not worth the cost of maintenance. The cost of maintenance during this period has to be added to the cost of maintenance during its productive life in any calculation of the efficiency of the animal. Later in life it again gradually becomes unproductive, and unless disposed of the cost of maintenance must also be debited to the account of the animal. The hide trade is largely Hindu but the zamindars and shroffs and agriculturists and rapidly dispose of it to the Mohammedan *gasais* of Panipat, Sonapat or Rohtak "asking no questions for conscience sake." We thus have the combination of a flourishing hide trade with the best breed of cattle in the Punjab. As long as the unfit are eliminated there is no secular objection to the slaughter-house. It is only when the best animals are so disposed of that the economist has any reason to complain.

163 At a cost of 1½ lakhs the Punjab Veterinary College can educate 50 students a year. Owing to the fact that a large number of Veterinary Assistants are out of employment owing to demobilisation and retrenchment appointments are not available for such a large number of graduates. Economy could be effected if other provinces in India would send their students for training to the Punjab Veterinary College rather than equip Veterinary Colleges of their own. There is no objection to this on the score of differences in local conditions, as might be urged in the case of an Agricultural College, nor does the medium of instruction stand in the way, as the course is given in English. The course extends over four years and is more comprehensive than

the courses given at the other Veterinary Colleges in India and conforms more to modern requirements. It is therefore particularly suitable for candidates from the whole of India who aspire to higher appointments. It already supplies the requirements of northern India, and students have come this year from as far as Mysore. In view of these facts the suggested Veterinary Colleges for the United Provinces and Behar would be superfluous. In the absence of a special staff for the purpose there is little time for research though some interesting enquiries have been made on special points. About 33 per cent. of the dogs bitten by a mad dog develop rabies. Experiments in the college hospital shew that the proportion is reduced to 2·3 per cent. if anti-rabic treatment is undergone. Though this figure must be slightly modified owing to the fact that some of the dogs may not have been really bitten by mad dogs there is nevertheless no reason to doubt that the treatment is efficacious.

164. Camels suffer extensively from *surra*, a disease which is caused by a *trypanosome*,—a minute parasite which lives in the camel's blood, and is carried from one camel to another mainly by blood-sucking gad-flies (*tabanidae*). Previously the disease was considered incurable, but the investigations of Captain Cross, the Camel Specialist, So-hawa, into the life history of the parasite, have thrown considerable light on likely methods of prevention and treatment of this disease. If certain species of blood-sucking flies were present in *surra*-infected zones, and were absent from *surra*-free zones, it would help to incriminate these species as transmitters of the infecting parasite. By collecting blood-sucking flies from every tahsil in the Province, and examining large numbers of camels in order to determine the incidence of *surra*, Captain Cross was able to indicate some new species of fly which transmit the disease. These flies lay their eggs on the leaves of aquatic plants, and on the leaves of trees and on rocks overhanging water. They are specially prevalent in a year of heavy rainfall. Thus swampy and riverain tracts must be regarded as dangerous while dry sandy areas are relatively immune from *surra*. Regarding the part played by ticks in the transmission of *surra* he has indicated a probable cyclical development of the *trypanosome* within the tick. He has also carried out certain investiga-

tions in connection with warble flies and has been able to identify the fly causing warbles in cattle and goats in the Punjab. His bulletin "The Bot flies of the Punjab" contains valuable advice to farmers anxious to deal with these pests. An infinity of work still remains to be done, but unfortunately Mr. Cross is retiring and it will be difficult to replace him.

165. It was inevitable that in a year of extreme financial stringency, such as 1922-23, a stock-taking of all spending departments should be made. Three times during the year did the fate of the Department of Fisheries hang in the balance—in the summer of 1922 before a Select Committee of the Legislative Council, in the following autumn and winter before the Retrenchment Committee, and in the spring of 1923 before the Budget Meeting of the Legislative Council. The Fisheries Department has indeed survived, but only on probation, and the test is that it should gradually reduce the excess of its expenditure over its revenue until it succeeds in becoming self-supporting, the process to be completed in a period of six years. It is still difficult to ascertain the exact financial position of the Department. But given sufficient staff to enforce the rules and to secure a proper conservation of fish it is arguable that bigger returns would probably be obtained by the Department from a licensing system than are now obtained by the auction of leases. The benefit of course to the food resources of the Province would be incalculable. A beginning has, however, been made with the policy of expansion. License fees in the plains generally have been raised from the inadequate figure of Rs. 3 to the more reasonable figure of Rs. 6, and the Fisheries rules have been extended to four districts, in which there were no leases. The Department though somewhat handicapped by the small travelling allowance grant, has made a fair start this year on the road to financial independence.

166. Meanwhile despite rumours of impending dissolution the Department carried on faithfully its normal duties of conservation and culture of fish. The enforcement of the Fisheries Regulations was hindered by an outcry of poaching encouraged by the rumours aforesaid and by the restriction on touring which resulted from the 50 per cent. cut made by the Legislative Council in the Fisheries

Difficulties experienced by the Fisheries Department.

budget estimate for the year. In the spring of 1923 a certain amount of ice-berg was made up; but the results are manifest in the drop in the number of licenses taken out and in the license fee income. The failure to introduce co-operative methods among the fishermen is ascribed to the ancient custom of the ownership of backwaters in which the Government of the Province is done. The right of the Government to use these waters was challenged by the fishermen. The trouble promised to be serious, but immediate steps were averted by tactful handling on the part of the local departmental officials. It may be hoped that the credit and supply societies will now be started and the movement will spread. The well being of the backwaters is one of the most important objects of the Department. Hence a main aim is to secure their willing assistance in the working of the system of fish conservation which is as much to the benefit of the fishermen themselves as to that of the community at large.

167. The Lahore Zoological Gardens were previously only a semi-official institution administered by a Committee under the presidency of the Deputy Commissioner, Lahore, and supported partly by Government contributions and partly by subscriptions from local bodies and private individuals. Great efforts had been made to collect subscriptions and the Gardens had been considerably improved. But the accommodation for the animals was unsuitable and the position was unsatisfactory as the limits of public generosity in the Province appeared to have been reached. At this point Government stepped in and took over the concern in January 1922, and a grant of Rs. 22,000 gross was provided for the year 1922-23 the Lahore District and Municipal contribution of Rs. 5,000 being taken into account in the general revenue estimates. The crying need of the Gardens is the construction of better houses for the animals, but under the system of provincialisation of finances an appeal cannot be made to the public, since all income is credited to Government, while the latter is itself unable to provide funds. A proposal is therefore under consideration to reorganize the system of budgetting so as to enable the Committee of the Gardens to make use of whatever subscriptions and contributions they may be able to collect in addition to the Government grants. The 'Zoo' like the Museum is a great resort of the rustic visitor to Lahore, and its popu-

larity continues to be unaltered. The Duck pond with its loquacious tenants is one of its most popular features, and the difficult problem of its water-supply has at last been solved. Another long-felt want was supplied in the generous gift of an otter pond by Colonel Malik Sir Umar Hayat Khan. The Monkey House requires rebuilding and enlargement; but it is hoped that under the new regime it will be possible before long to find money to remedy what is admittedly the weak point of the institution.

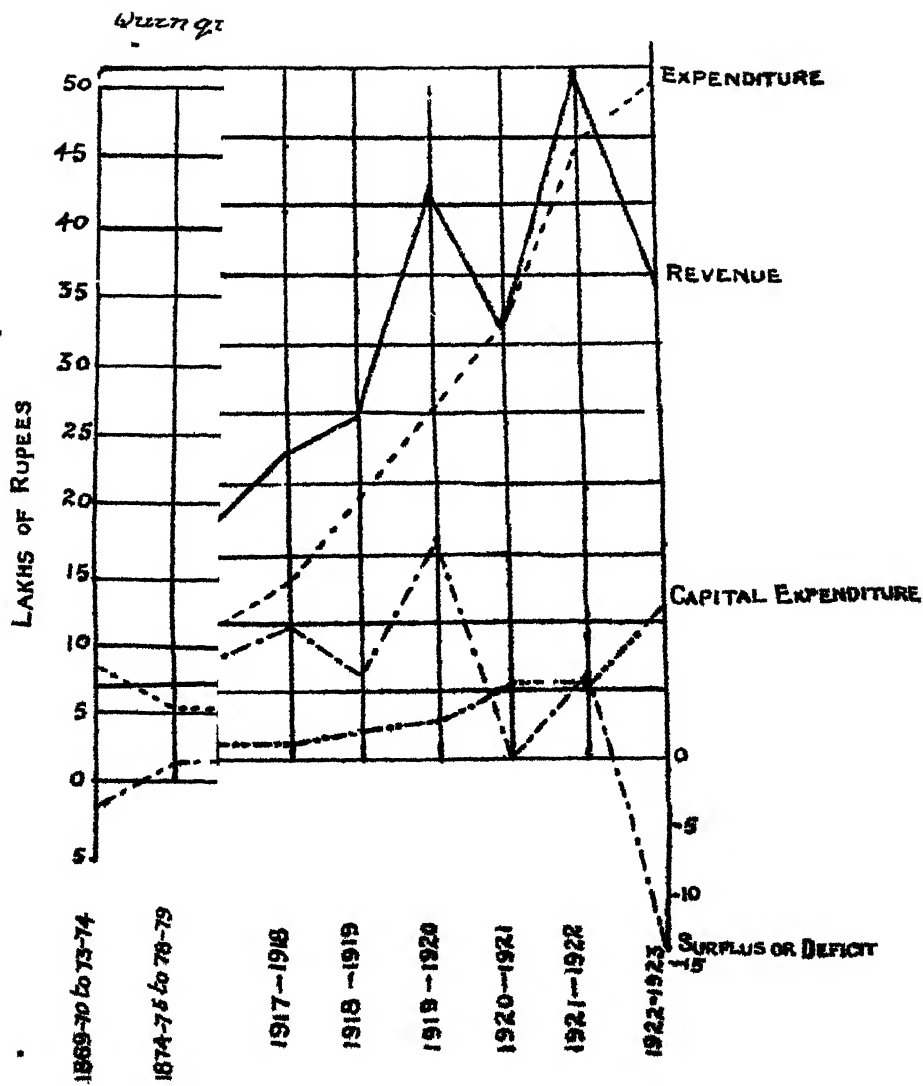
CHAPTER IX.

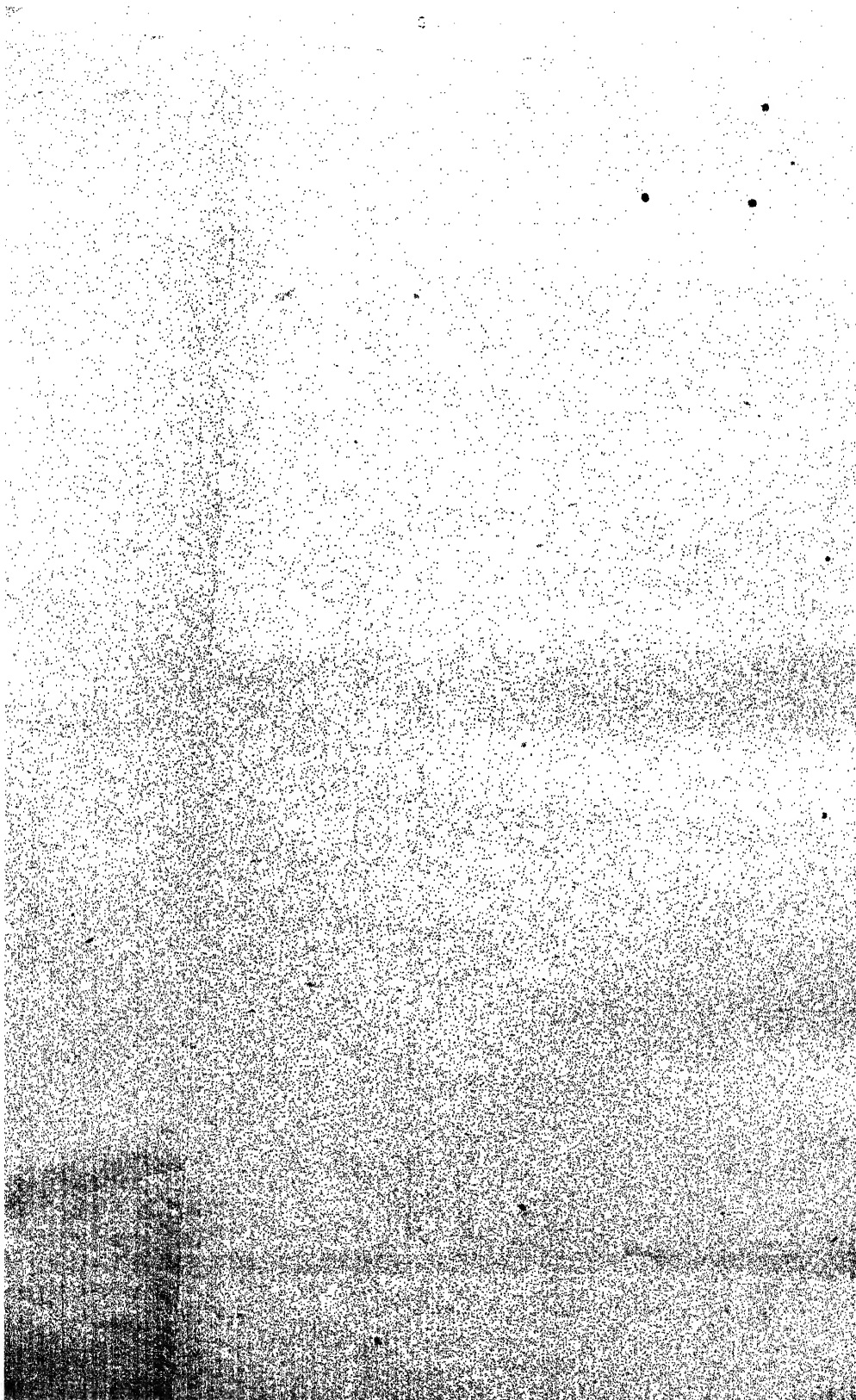
PRODUCTION AND DISTRIBUTION.

160 The financial year has proved the leanest on record. The trading account shows a gross profit of Rs 1.94 lakhs. Deducting from this Rs 1.64 lakhs, interest at 6 per cent on capital expenditure for the last ten years (Rs 34.32 lakhs) and Rs 2.03 lakhs depreciation of timber and plant, there remains a net loss of Rs. 1.73 lakhs. All businesses must have their ups and downs and at a time of falling prices many better organized businesses in India would be glad to show so small a loss. Last year under more favourable conditions the net profit was Rs 13.44 lakhs.

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lakhs and there is every reason to believe that the measures taken to avert the results of trade depression will avoid loss in the future. In estimating the total excess of expenditure over income the capital expenditure of Rs. 11.33 lakhs must be taken into account, making a total cash deficit of Rs. 14.09 lakhs. Since the Forest Department began its operations, the total revenue has exceeded Rs. 708 lakhs and the expenditure has only amounted to Rs. 542 lakhs, of which Rs. 51½ lakhs were spent on capital works not strictly debitable to the revenue account. The surplus has aggregated Rs. 166 lakhs.* In view of these facts a deficit in a year of trade depression need not be viewed too despondently.

170. The immediate cause of this deficit was due to the fall in value of timber. The cost of production of hill sawn timber delivered in sales depôts, such as Doraha on the North-Western Railway, may be taken as Re. 0-12-0 per cubic foot. In 1920-21 the price per cubic foot of deodar timber was Rs. 3-0-6 and of fir and spruce Re. 1, while in 1922-23 the respective prices were only Re. 0-14-6 and Re. 0-5-5. In the latter year only deodar timber sold at a profit and all other kinds of coniferous timber had to be sold at a loss. Shisham and mulberry firewood from the irrigated plantations in the plains, and firewood generally, with resin from the submontane forest divisions, however, yielded a good profit and were the mainstay of the year's revenue returns. But the general fall in timber prices rendered it necessary for Government to determine the copartnership Talwara Saw-mill Scheme inaugurated in 1921-22, an adventurous endeavour to secure for Government some of the profits in a business timber enterprise. Unfortunately this attempt to modernise the lumbering, conversion, and marketing of coniferous timber in the Punjab will result in a dead loss of Rs. 2½ lakhs to 3 lakhs. But a quasi-commercial concern, such as the Forest Department, must have its occasional set-backs in commercial ventures, and the lengthy list of business failures in Calcutta and elsewhere recently only emphasises the wisdom of the course adopted by the Punjab Government in withdrawing from the Talwara Saw-mill Scheme.

The supplies of spruce, fir and blue pine timber available in the forests of the north-west Himalayan tract are practically illimitable. But until new methods of utilizing them are practised the market will be inadequate. Fresh possibilities include the utilization of treated spruce and fir timber for railway sleepers, and coniferous timber for match making, sulphite pulp, electric battery casings, ferro-concrete shuttering, and in the preparation of rosin oil from rosin and lamp black from resin waste. Mulberry timber also can be utilized for making textile implements, such as tubes and bobbins, and bent wood furniture.

171. An organised attempt is being made to prevent the continued erosion of the Pabbi Hills and to reclaim areas in those hills which have suffered severely from this cause. Reclamation and afforestation in the Pabbi Hills. Efforts are mainly directed to prevent the rapid flow-off of rain water from these generally barren hills and to the regulation of the flow of water in the large nullahs by means of earthwork dams constructed with a view to the silting up of the stream beds behind them, so that eventually the stream beds are "stepped" and the rate of flow and consequently of "scour" reduced. Results so far are of considerable promise, the dams in the side and main ravines have, on the whole, held well and have caused the accumulation of considerable depths of silt behind them. The gradual "stepping" of these ravines with a view to lessening the velocity of the water therein is progressing satisfactorily. Grass is now growing in the reclaimed area and *jand* (*Prosopis spicigera*) and *kikar* (*Acacia arabica*) trees are now establishing themselves on the ridges on the lower side of the trenches. A few years' more work on these lines should convert the Pabbi area into a great fodder reserve which should be invaluable to the Province in seasons of drought. The experience gained this year will be of considerable value to the Land Revenue Department in the reclamation work which it is undertaking in the Hoshiarpur *chos** and the eroded hill sides in the Ambala and Gurgaon district (*para* 47).

172. The Forest Department is not merely a money making concern: it also benefits the public directly by the provision of grazing and fuel. Grazing has been provided for 3

Grazing and fuel
allowed by the
Forest Department

* Dry water courses.

million cattle, 1·9 million sheep and goats and 2 million other animals. The Department has perhaps too generously allowed grazing by the browsing animals, such as camels, sheep and goats which lay bare the hillsides by devouring the tender leaves of the young shoots. Political pressure urges the extension of grazing areas in order to improve the milk supply. But as has been shewn elsewhere (*para.* 161) this object can be better attained by growing concentrated fodder crops, introducing modern methods of stall-feeding, breeding of good milk-producing strains and transport facilities to markets. The necessity of an adequate fuel-reserve cannot be over-emphasised. The widespread use of cow-dung as fuel results in the progressive impoverishment of the soil by the removal of valuable chemical constituents, and the situation is growing daily worse with the increase of the fuel consuming population and the decrease of fuel reserves. From this point of view it is a matter of regret that those who undertook the excellent project of planting a garden city outside Lahore should have combined with this project the destruction of the Kot Lakhpat plantation which was a valuable source of fuel-supply for the town of Lahore.

173. The relations of the department with the public are improving. Forest offences are proportionately high in the low hills of the Rawalpindi district where the population is denser than in the mountainous tract of the Himalayas or the irrigated plantations of the plains. With the association of local people in forest industries, such as lumbering and resin tapping, much has been done to avert antagonism. Most of the unpopularity of the Department is due to the lowest grade of officials, that of forest guards, who are under the temptations to dishonesty which must always be felt by underpaid Government officials. But no better method of forest protection has yet been devised and they must be looked on as a necessary evil. The members of the Legislative Council, however, have shewn themselves willing to appreciate the work of Government departments when explained in an intelligible form, and an organised propaganda amongst them and their constituents should do much to remove the misapprehensions which obtain as to the utility of the Forest Department to the public and to Government.

174. The financial position of the Punjab during the year 1922-23 precluded the initiation of new schemes of industrial development. Considerable progress was, however, made with schemes which had already been undertaken, and the activities of the Department of Industries as an agency for the encouragement of industries generally, and for the improvement of Industrial Education, were not curtailed, the expenditure on the Department rising from Rs 5½ lakhs in 1921-22 to Rs 8 lakhs in 1922-23. One of the chief of these functions is the collection and dissemination of commercial and industrial intelligence. A good library which is open to the public is being built up and considerable numbers of commercial and trade journals are subscribed for. These sources of information are supplemented by the general and special enquiries carried out by the Industrial Surveyors, and much material has been collected with a view to enabling the Department to reply to the numerous enquiries on such subjects as the sources of supply of raw materials or manufactured articles, outlets for the disposal of provincial products, the possibilities of starting various industries, and the agency for the supply of machinery.

175. Progress in the extension of public electric supply in the Punjab will inevitably be delayed till the scheme for obtaining hydro-electric power from the Himalayas is completed. A new license has, however, been granted for the supply of electric energy at Multan, and it is anticipated that supply will be available there before the summer of 1924. The Jullundur Electric Supply Company which was granted a license in October 1922 has at last made up its mind to start work on active construction. A public electric supply started by the Military Works Department in the Ambala Cantonment towards the close of 1922 has supplied a long felt want to one of the most important military stations of the Punjab. At Rawalpindi, however, for the supply of which a license was granted in 1920, practically nothing has been done. Matters came to a head during the year 1923, the existing license was cancelled, and an application for a license from another company was received. The negotiations with a prospective licensee for Lyallpur fell through, nor has anything further been heard of the Gujranwala

scheme which was under consideration in the year 1921. The Amritsar Electricity Department extended its system, but it is still unable to meet the requirements of the town. The difficulty of obtaining electric energy in large centres in the Punjab constitutes both an industrial handicap and a social inconvenience.

176 The Punjab Arts and Crafts Depot serves a dual purpose: it provides the art-craftsmen of the Province with a market for their wares and in association with the Mayo School of Arts it uses its influence to improve design and workmanship. When the depot started the stock was so small as to consist for all practical purposes merely of samples from which orders could be booked and retail cash trade was almost impossible. Gradually, however, stocks have been accumulated and, though it has been found necessary to raise the prices charged, cash sales have increased very largely. The depot has now exhibited at three British Industries Fairs but the orders received in consequence have not justified the expenditure involved, and it is apparent that without a permanent agency in London the depot will not be able to effect very much in the direction of finding an overseas market for the craft products of the Province. The success, however, which has been achieved in bringing a family of Lahore workers in block-printing on cotton and satin into direct contract with large English houses is an example of the way in which the depot can prove its worth: for it is due entirely to the training and experience received in the Mayo School of Arts and to the introductions effected through the agency of the depot that this family is able now to deal independently. Similar efforts are being made in connection with Multan cotton printing with most encouraging results. The depot has also been successful in improving the design and workmanship of Lahore brass and copper work, Hoshiarpur inlay work and the Ferozepore and Julundur chased lacquer work. The latter was particularly admired at the last British Industries Fair and sales of this class of work at the depot itself have been considerable. From the financial point of view results have been less satisfactory. Hitherto the depot has been financed by a somewhat cumbrous system of special advances. Sanction has now been obtained to the opening of a personal ledger ac-

count in the name of the Controller, a system which will allow the Controller considerable freedom and should result in the attainment by the depot of a greater degree of commercial success than has been possible under the strait-laced financial system which prevailed in the past.

177. The large cattle population of the Punjab (*para.*
 The Tanning Industry. 147) implies as large output of hides and skins. Local manufactures of skins and leather have steadily increased in recent years. Moreover, in spite of the disorganisation caused by the War, hides and skins still form one of the most important items of export, and the proportion of tanned hides exported is steadily increasing. Tanning is a primary industry, as it advances raw material produced in the country by a further stage.* The equipment of most of the tanneries, however, leaves much to be desired. In some cases, where up-to-date machinery has been installed, it has lain idle ever since for want of men trained to use it, and it is partly to supply this lack of trained men and partly to demonstrate the possibility of turning out a high grade leather hitherto undreamt of in the Punjab that Government has undertaken to construct and work a small model tannery at Shahdara, near Lahore. But whatever success may be achieved in introducing modern machinery and improved methods in the tanneries, a really good class of leather will never be turned out unless the raw material available to the tanners is improved, and special efforts are therefore being made to teach better methods of flaying. Improved methods of curing and packing have also been introduced, leading to elimination of the loading of skins with foreign matter and the avoidance of cracks and heavy creases. The better prices which have been secured as a result of these improved methods have favourably impressed butchers and tanners with the value of the advice furnished by the Department of Industries.

178. Next to agriculture the hand-loom weaving industry is still the most important in the Province both as regards the number of workers engaged and the value of its products. A population of no less than 3 lakhs still relies on weaving as its main occupation, though many of these assist

in agricultural operations at harvest time or when wages are high. More and more, however, hand-loom weaving is beginning to suffer competition of the mills. No improvement in methods of working can eventually enable it to compete successfully in the open market with mill products except in the case of artistic goods where the individual attention and taste of the hand worker should always enable him to produce a finer product than that to which the automatic products of the mills can hope to attain. The future of hand weaving lies with such artistic products and with goods made purely for home consumption. Steps are, however, being taken by the Department of Industries to keep the decaying industry alive as long as possible by the introduction of the fly-shuttle loom, and more readily marketable cloth patterns. With this object several Jacquard machines were set up at the Central Weaving Institute in Amritsar. By means of these machines the most intricate patterns can be woven; the healds, or vertical threads through which the warp threads pass, being so arranged that each is independent of the others, so that any desired combination of warp threads can be raised or lowered at any time. But Jacquard machines are costly and beyond the resources of an ordinary weaver, though they are likely to be taken up by the owners of the many small factories which are now coming into existence.

179. The Co-operative Department is devoting its attention to the financing of weavers' societies. Ordinarily the weaver is in the position of a slave to the *bannia* who advances him yarn and receives from him the finished product, only allowing him to retain the minimum wage which will suffice for his subsistence. In the case of Co-operative Weavers' Societies advances are obtained from the Central Weavers' Stores at Amritsar. Unfortunately in 1922-23 heavy losses were sustained owing to the depreciation in the value of stocks held. As prices fell the weaver found it difficult to sell his goods and offered them in large quantities to the societies as a security for a further advance of yarn. The losses which occurred were inevitable at a time of falling prices, though they were unnecessarily large owing to the fact that the weavers failed to take the businesslike view that it was necessary for them to sell their goods at a loss rather than store them in

definitely in the hope of prices rising. But the fact that the societies managed to survive a year in which so many merchants were ruined, augurs well for the future. One of the societies confronted with a loss, is making a monthly levy of Re. 1 to Rs. 2 from each member to meet it. Twelve societies have adopted the rule of compulsory deposits. The fact that such a spirit is shewn by men who a short time ago constituted the most ignorant and thriftless element of the population is a sufficient testimony to the value of the work done by Co-operation.

180. It has long been recognised that the maintenance by Local Bodies of industrial schools which are partially financed by Government grants-in-aid is an uneconomic and inefficient means of advancing industrial education. Excluding the Industrial School at Delhi, there are eight industrial schools in the Punjab which are controlled by Local Bodies, and for which Government grants are paid annually. During the year 1922-23 it was definitely decided that the system of grants should be abandoned, and that these schools should, as far as possible, be taken over by Government. The majority of the Local Bodies concerned would probably have agreed to complete and immediate provincialization. By this their financial responsibility would have ceased, while at the same time their existing schools would have been maintained. It would, however, have been quite impossible to take over all the existing schools without providing for a considerable increase in the annual contribution of Government towards industrial education—a matter of some difficulty at the present time. It was at first suggested that all grants should be withdrawn, and that the amount provided annually for grants should in future be applied to the provincialization of a limited number of the more important schools. This suggestion was, from the point of view of efficiency, sound. It omitted, however, all consideration of the popular demand for industrial education, and of the claims of the Local Bodies from whose institutions the grants were to be withdrawn. For these reasons it seemed desirable that the process of provincialization should be gradual, and should not have the effect of diminishing the existing number of schools. A scheme has accordingly been drawn up under which Local Bodies will, for a period of five years, pay an annually dimi-

nishing contribution towards their existing schools. In return, Government will take over the schools as provincial institutions, and will at the end of five years assume full responsibility for their maintenance. How far this scheme will commend itself to Local Bodies remains to be seen.

181. The Panjab mining industry is relatively unimportant. During recent years it has, however, received a great forward impetus from two causes, the discovery of mineral oil in large quantities in the Attock district, and the rise in the price and freight cost of coal from Bengal combined with the difficulty of obtaining it. Oil springs have been known for many years to exist in the Rawalpindi and other districts in the Panjab, but the output was insignificant until the discovery of the Khaur field, which still remains the only one worked, though numerous companies are continuing their activities in sinking wells in the neighbourhood. Previous to 1922 the maximum annual output of the Province was attained in 1918 when the War rendered import from abroad costly and difficult. The output then reached $\frac{3}{4}$ million gallons, but it fell subsequently, and in 1921 was only 59,000 gallons. But the completion of the new road from Fatehjang to the oil field at Khaur and the laying of a pipe line from Khaur to Rawalpindi have enabled Attock oil to be put on the market at a reasonable price. At Rawalpindi the Attock Oil Company have set up a refinery equipped with most modern machinery which has enabled them to place manufactured oil on the market. Owing to this opening up of the oil district the output of oil rose to 7 $\frac{1}{4}$ million gallons in 1922. The revenue from mines increased from about Rs. 1 lakh in 1921-22 to Rs. 1 $\frac{1}{2}$ lakhs in 1922-23, a sufficient testimony to the way in which money invested in the development of communications is repaid by the increased wealth and consequent taxable capacity which ensues. The oil output of the Panjab nearly equals that of Assam though it is still less than a fortieth of that of Burma. But in view of its future possibilities the Panjab may now take rank as one of the sources of Empire oil supply. The coal output was only 67,000 tons, which is the same amount as last year. Compared with the total Indian output of over 18 million tons this amount is infinitesimal, but the possibilities of development seem greater when once adequate communications are provided.

182. Factory inspections disclose a radical difference between the conditions of perennial factories, which work all the year round, and seasonal factories, which are only utilized for a short time during the year.* The former are invariably well lit with electric light, sanitary rules are observed, and drainage is adequate. They are white-washed and well ventilated. Hours of employment are well within the demands of the Factories Act. Adequate care is taken to guard dangerous machinery. In seasonal factories the conditions are very different. Most of these precautions are neglected. Many ginning factories of this class continuously violate all the sections of the Factories Act relating to hours of work. The ventilation of their ginning rooms and the keeping of them free from dust remain a serious problem. Cotton ginners can be picked out from amongst other workers by their unhealthy appearance; ten hours daily in the dust-laden atmosphere of a ginning room quickly affects both eyes and throats; and it is not unusual to find cotton ginning workers almost speechless from dust at the end of the day. As 90 per cent. of these workers are women and children, of whom nearly 5,000 are in the Punjab alone, the problem should be regarded as a sufficiently serious one.

183. Joint Stock enterprise in the Punjab† is almost entirely confined to banking and trade activities. In the industrial sphere it is practically non-existent. The hesitation shown by those who own wealth to invest it in these bodies is not altogether without reason. The companies seem to regard the Companies Act more as a repressive measure instituted by Government than as a necessary safeguard to the interests of the shareholders. Generally speaking, there is considerable laxity in the observance of the Act. Some companies seem quite indifferent to the necessity for accuracy even in recording facts for their own information. In one case the Directors printed one prospectus for the Registrar and another for prospective buyers of shares. The auditor who is too efficient is apt to be offered a fee so much reduced that he is certain to refuse it; whereupon the company becomes at liberty under the Act to appoint some one more easy going. An audit is moreover sometimes done almost entirely by untrained clerks, and the real auditor does little more

than affix his signature and assume responsibility. The general policy of Government has been to say as little as possible by way of criticism on the general administration of companies under the Act in order to avoid anything that might be taken as discouragement of joint stock enterprise. Endeavour has been made to warn and teach and so to try ensure compliance without prosecuting the offenders. Possibly this leniency has facilitated the formation and continuance of fraudulent concerns, but the responsibility for these rests with the shareholders rather than with the Registrar. Though the public prefer to regard him as the custodian of their investments and the guardian of their interests, his duty is confined to ensuring them the information which they have a right to know.

184. In 1922 a Wages Survey was undertaken which gives some idea of the general tendencies of wages. The survey is made quinquennially. Such accounts of wages may serve one of two purposes. They may attempt to measure fluctuations in the prosperity of the working classes year by year, or, neglecting short period fluctuations, they may attempt to record the slow changes in the standard rates of wages. The former was the object aimed at by the old half-yearly wages return which was made from 1873 to 1908. But short period fluctuations of this type can also be traced in the area and crop returns, in the exports of agricultural staples, in the consumption of piece-goods, salt and other excisable articles, and above all in the price fluctuations of the staple articles of food. It was therefore considered that a record of fluctuations over a larger period would be more valuable, and for this reason the wage census was made quinquennial.

185. In order to attain increased accuracy the *kanungo*, a man in direct touch with rural conditions, was asked a number of simple questions which he could understand. His replies came straight to the Statistical Branch of the Director of Land Records' Office free from any intermediate filtering. Investigation was confined to workers of maximum efficiency, i.e., healthy men between the ages of 20 and 45. From these the wages of the sick and infirm, women, children and the aged could always be deduced approximately. The investigation related to urban

and rural areas and to unskilled and skilled labour. For rural areas four typical villages were selected in each *Kanungo's* circle.

126 But the smallness of the industrial population even in the selected centres of Lahore, Amritsar and Multan is remarkable. The populations of such towns are mainly commercial and parasitic and the relative unimportance of industries must be always kept in mind in studying urban wage statistics. The survey does however illustrate the greatly increased cost of labour due to the rise in prices. The recent oscillations, however, in the prices of staple food-grains render it difficult to form an estimate as to whether real wages are tending to rise or fall. Wages tend to follow prices, but at a slower rate. Increased wages resulted from the high prices of food-grains in 1921, but reduced prices have not reduced wages in the same proportion and it may be asserted with some confidence that the urban labourer in December 1922 was better off than his predecessor in 1917. But clearly this gives no answer to the main question which the quinquennial survey set out to solve, *viz.*, what is the general trend of wages. Prices were rising in 1917 and real wages were therefore depressed; they were falling in 1922 and real wages were therefore enhanced. The general trend of wages can only be ascertained by observations extending over a larger period, when prices have become established after the violent fluctuations caused by war conditions.

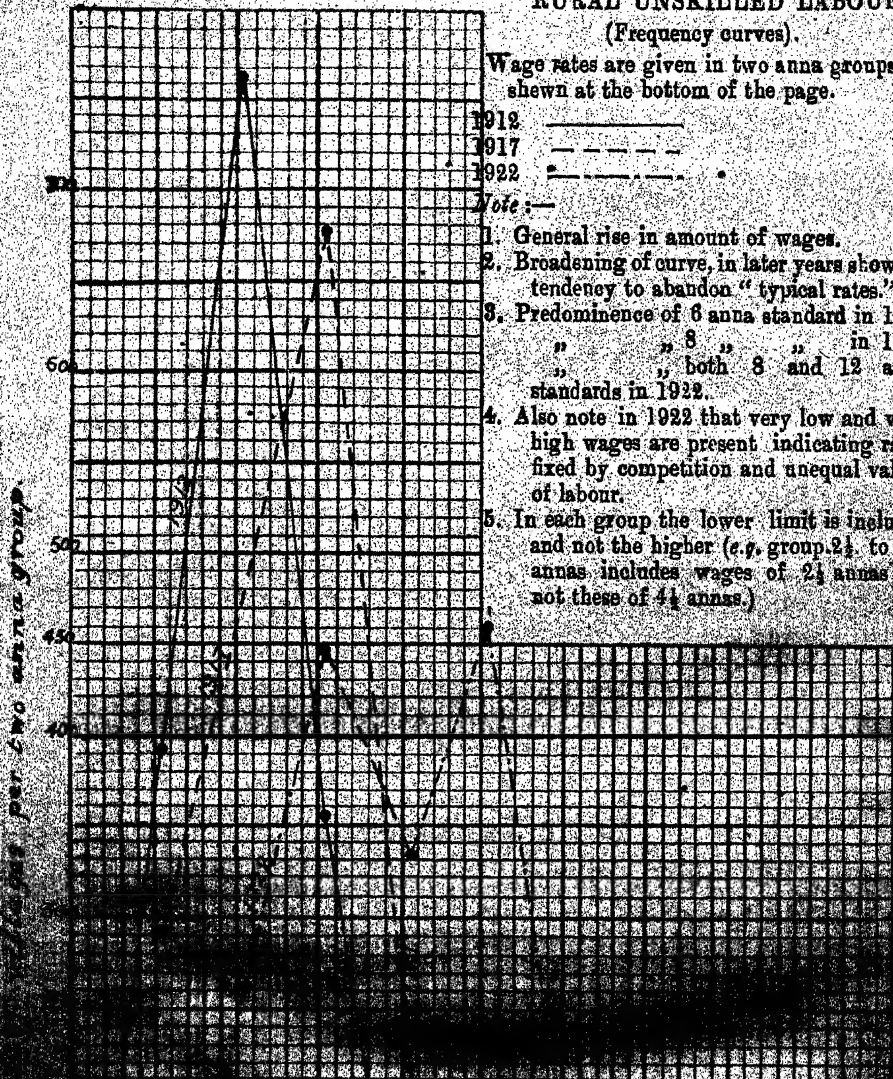
187. Rural wages in adjoining districts are (as might be expected) less than those of similar crafts in towns. But such figures conceal many important facts. The rural labourer or artisan gets many things free (in particular a house to live in) for which his urban brother has to pay. These differences more than cover the difference in wages. But the difference in outlook between the urban and rural labourer in the Punjab is so great that such comparisons are of doubtful value. The rural has less expert knowledge than the urban craftsman, but he is expected to be more of a handy man. He must be of a hardier type to stand the life; but if he can do so he is probably far better off. Yet though poets and philosophers continue to ~~descant~~ on the advantages of a country life, erring human nature continues to prefer the dissipation of the town. In



RURAL UNSKILLED LABOUR.

(Frequency curves).

Wage rates are given in two anna groups, as shown at the bottom of the page.



1912

1917

1922

Note:—

1. General rise in amount of wages.
2. Broadening of curve, in later years showing tendency to abandon "typical rates."
3. Predominance of 6 anna standard in 1912
" " 8 " " in 1917
" " both 8 and 12 anna standards in 1922.
4. Also note in 1922 that very low and very high wages are present indicating rates fixed by competition and unequal values of labour.
5. In each group the lower limit is included and not the higher (e.g. group 2½ to 4½ annas includes wages of 2½ annas but not these of 4½ annas.)

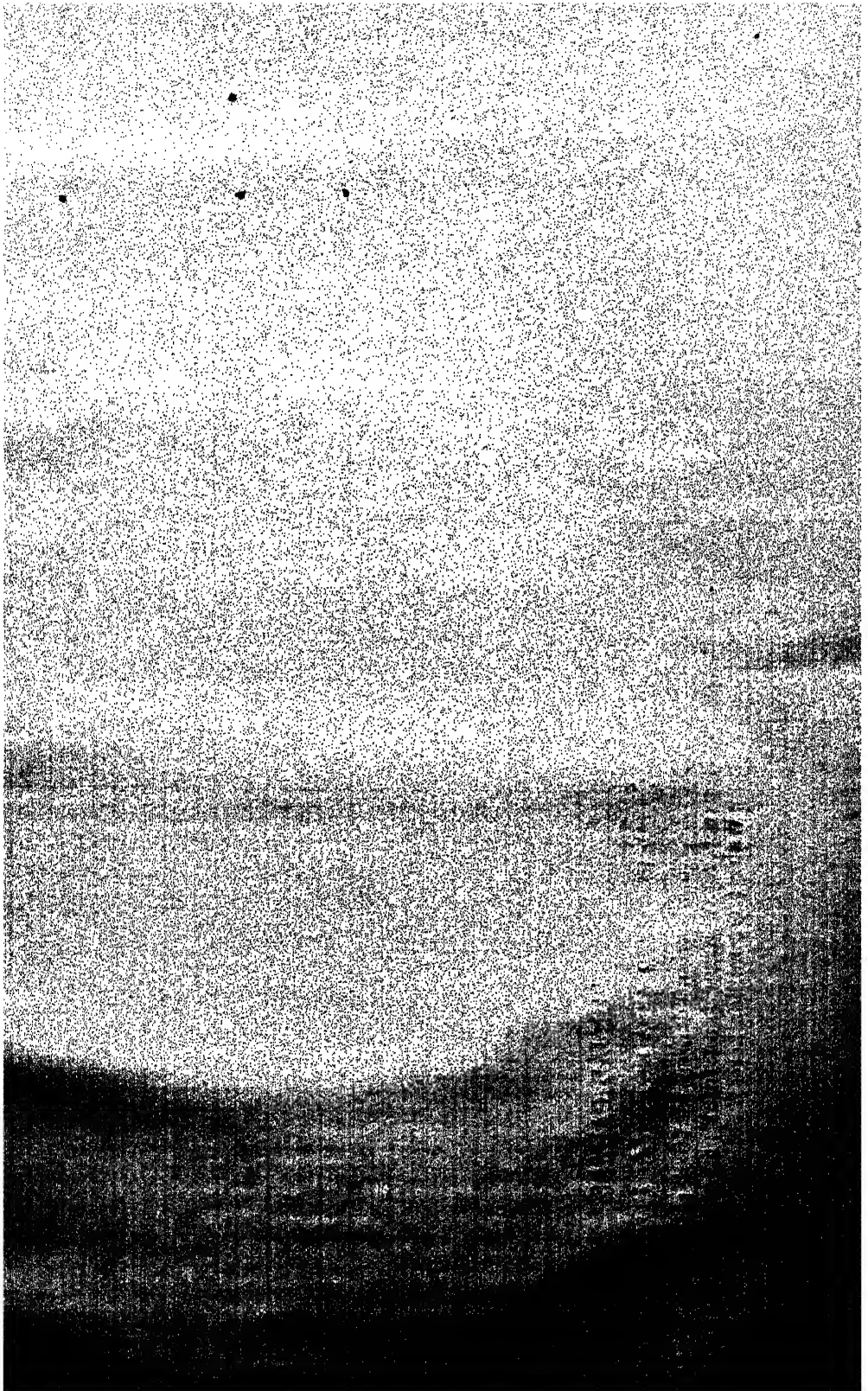
making such comparisons we verge on the aesthetic and leave the strictly economic sphere which is the subject of a wages survey.

188. The survey indicates a general rise in wages together with a tendency to abandon conformity to a typical wage.* Village rates for unskilled labour are still fixed, but they tend more and more to have a competitive rather than a customary value. Where labour is plentiful the rates are low, and *vice versa*. Moreover, in villages where the land-owning tribes is hard-working (*e.g.*, Arains, or Jats of the Eastern Punjab and the Malwa) their menials tend to work hard and remain occupied, and to command a high price for their labour; while in villages of idle zamindars the menials also tend to be idle and to get less wages.

189. In comparing Punjab rural conditions with those of another province, such as the United Provinces, the large mass of cultivating proprietors should not be forgotten. They constitute the most characteristic feature of rural life in this Province, and the investigation of the conditions under which they work and live is one of far more importance for the rural economics of the Province than that of the wages of the classes dealt with by this survey. These classes have not in the Punjab the same importance as in a province like the United Provinces where the land-owners are mere rent-receivers. The value of the wages survey mainly lies in the light which it throws on the trend of wages under the influence of war conditions, a diminished labour supply due to losses from disease (especially the influenza epidemic), and the further opening up of the Canal Colonies. Prices have not only generally risen but have become more unstable. The quinquennial wage survey which before the war would have given a good record of long period fluctuations now deals with a period that is too short for the long period fluctuation caused by the war, while it fails to record the short period fluctuations due to the remarkable oscillations in prices which have characterised recent years. The only general results that can be deduced are that wages have risen, have become more competitive, and tend to differentiate more between qualities of labour and local demand.

190. The Buildings and Roads Branch of the Public Works Department supervises an annual expenditure of about Rs. 1 crore. Under the financial methods enjoined by Government this expenditure has to be fitted in to the financial year—a system which compels all work to be completed in the middle of the building season by April 1st. It is therefore not surprising that there have been difficulties with the Audit Department. These difficulties are, however, being gradually removed. Meanwhile, the Department is taking more practical steps towards economy. The Punjab Retrenchment Committee drew attention to the overlapping involved by the maintenance of a duplicate engineering staff in the same areas by the Public Works Department and District Boards. District Engineers are retained by District Boards to make roads and erect buildings, even when these are being financed by the Government's grants to the Boards. Moreover, the District Boards maintain at considerable expense a staff to do work which can be better done by the Public Works Department staff in the same district. While expensive, the District Board staff is really inefficient, as it lacks the supervision from outside, which superior officers of the Public Works Department exercise over their staff.

191. Inferior communications have proved a great handicap to the development of the Punjab Canal Colonies (*para. 41*). These colonies were planned purely from the irrigation point of view without any thought as to where towns were to be laid out or whither roads were to go. In consequence of the lessons learned by experience the irrigation scheme for the new Colony in the Nili Bar* is being worked out in conjunction with a project for the preliminary lay-out of towns and mandis and provision of communications, which is being prepared by the Buildings and Roads Branch. This method of anticipating difficulties will render unnecessary much of the expenditure on bridges and roads in Canal Colonies which has been caused by the lack of similar foresight in the past and at the same time will provide a very considerable contribution to the auction sales of land and prove very remunerative to the Government.



MILLION ACRES.



192. The use of reinforced concrete for building purposes is now world-wide. Hitherto the use of reinforced concrete in the Punjab has been restricted owing to the high cost of cement. This is now being removed by the enterprise of the Punjab Cement Company, which has agreed to supply cement from its works at Hasan Abdal in the Attock district at half the previous market price.

193. The undesirable habit of encroachment on public thoroughfares which has given such trouble to Municipal Committees (*para. 60*) is being dealt with by the Public Works Department in the roads which it administers. The main difficulty has been that the Public Works Department map is not accepted in a Court of law as positive proof, but only as presumptive proof of the boundaries of the roads to which it relates. Judgment was generally given in accordance with the revenue records, which are not sufficiently accurate for the purpose. Arrangements have now been made with the Revenue Authorities in congested areas permitting the Public Works Department to define their roads by irremovable boundary pillars which will be recorded in the revenue maps as "fixed points." The distances between these and other existing fixed points will be recorded in feet units not only on the Public Works Department map, which will be signed by the Revenue Authorities, but also in the form of inset maps on the revenue maps. Scattered plots of Government land, of considerable area in the aggregate, adjoin the highways of the Province. These plots were originally acquired and planted as groves for the purpose of affording shade to travellers in the heat of the day. The more rapid methods of travel which now prevail render these relics of a more sedentary age no longer necessary and it is proposed to sell those which are not useful for road purposes.

194. The agricultural prosperity of the Punjab is mainly due to irrigation. The total canal irrigated area has been steadily rising. In 1893 it was only 3 million acres, it rose to 5 million acres in 1901 and remained fairly stationary till 1903, since when with the expansion of the Upper Canal System it rapidly rose to 16.3 million acres in 1920-21.

This year it has reached a record of 11·5 million acres, over a million acres greater than the total arable area of England and Wales. In 1922-23 the total capital expenditure on irrigation was Rs. 185 lakhs, of which Rs. 8 lakhs were spent on the older canals, Rs. 15 lakhs on the Colony canals and Rs. 162 lakhs on the new Sutlej Valley Project.* Rs. 3 lakhs were realised from the sale of surplus stores rendered available by the completion of works on the Triple Canals and from colonists on account of water-courses which Government had built for them in order to secure rapid development of the Triple Canal system. Deducting this, the net capital expenditure amounted to Rs. 182 lakhs.

195. The gross revenue receipts amounted to Rs. 531 lakhs as against an average of Rs. 475 lakhs in the previous triennium. This includes Rs. 171 lakhs, indirect receipts. Indirect receipts represent an estimate of the increased value of the revenue due to irrigation and include receipts from land revenue, water advantage rates due to the canal, malikana and interest at Rs. $5\frac{1}{2}$ per cent. on *nazrana* and sale proceeds of Government waste lands in the Colonies.† Deducting working expenses amounting to Rs. 168 lakhs the net revenue earned by productive works amounted to Rs. 363 lakhs or a return of nearly 15·4 per cent. of the total outlay of nearly Rs. 23 crores as against 15 $\frac{1}{2}$ per cent. in 1921-22. The increase in revenue was due to the increase in the irrigated area during the rabi 1921-22. Interest charges amounted to Rs. 77 lakhs and after defraying these a net profit of Rs. 286 lakhs or 12·1 per cent. on the capital outlay remained. If direct receipts alone are considered the net profit after defraying interest charges comes to Rs. 115 lakhs.

196. The estimated average value of the crops raised on all canals during the year works out at Rs. 49·3 crores‡ giving an average rate of Rs. 46 per acre assessed as against Rs. 63 in the previous year. The decrease is due to the fall in price of wheat and other commodities. The total value according to this estimate amounts to a little over twice the total capital outlay (Rs. 23 crores) on all the canal systems

* See 1921-22 Report, I, 375 foll.

† See 1921-22 Report, I, 126.

‡ In column 5 of the statement in para. 120 the value of irrigated crop is given at 55·8 crores but this includes well-irrigated land, and (as is explained there) is probably an under estimate.

up to date including, of course, the Sutlej Valley Project now under construction. Out of Rs. 46 the Canal Department recovers only about Rs. 5.6 per acre as direct and indirect receipts and the rest goes to the *zamindar*.

197. The total cost of the Sutlej Valley Project is estimated at Rs. 14½ crores. Upon this a return of 12½ per cent, is anticipated from water rates alone. But the scheme has another, and even more important, source of revenue. On the introduction of irrigation, no less than 3½ million acres of desert waste, the property of the Punjab Government and Bahawalpur, and Bikaner States, at present valueless, will become available for colonization and sale. It is customary, in the *pro-forma* accounts of irrigation projects, to credit a scheme with the interest on the sale-proceeds of Crown waste lands rendered culturable by its construction; if this is included, the annual return of the project will amount to nearly 38 per cent. It bids fair, indeed, to rival the Lower Chenab Canal, the return from which during the past seven years has averaged over 41 per cent. The scheme was sanctioned at the end of 1921 by the Secretary of State. Six Superintending Engineer Circles, 20 Divisions and 60 Subdivisions have been constituted in 1922-23 to forward this project. Surveys are being made, sites located, channels aligned, land acquired and 35 million cubic feet of earthwork have already been excavated.

198. The Thal Canal Project provides for the construction of a perennial canal offtaking from the Indus at Kalabagh to irrigate the entire Sind Sagar Doab down to the irrigation boundary of the Muzaffargarh Inundation Canals. It covers a gross area of five million acres or about one-twelfth of the gross area of British Territory in the Punjab. The project is estimated to cost Rs. 9.3 crores, to give an irrigated area amounting to nearly two million acres, and to yield a return of about 18 per cent. on the total capital outlay. In 1922-23, 2 million acres of country were surveyed and 3 million acres of soil survey was completed. The quality and classification of the soil of every 10 acre rectangular plot into which the whole area is being divided, was recorded in registers. All the survey work is expected to be finished by the spring of 1924 when the preparation of

* See 1921-22, Report, I, 375 foll.

a detailed project estimate will be taken in hand for submission to the Government of India.

199 The total capital expenditure during the year 1922-23 on the North-Western Railway was Rs. 211 lakhs as against Rs. 180 lakhs last year. Out of this amount no less than Rs. 112 lakhs was spent on rolling stock as against Rs. 54 lakhs in the previous year. Of the total expenditure Rs. 15 lakhs was spent on lines which have been made for purely military purposes. The total capital outlay on the Railway up to date is now Rs. 104 crores. As will be seen from the accompanying statement net earnings have increased considerably in last year though the percentage on capital outlay is still less than in 1920-21 :—

Revenue (Rs. in lakhs)

	1920-21	1921-22	1922-23
Gross income	13.05	13.02	14.17
Working expenses	10.03	12.61	14.33
Net earnings	3.02	4.1	2.15
Percentage on capital outlay	3.1	4	2.1

The receipts from passenger traffic have remained nearly stationary. Increased rates have compelled a large number of persons who previously travelled by the higher classes to travel third class. In spite of this, however, as the annexed statement shows the increased receipts from the third class more than counter-balance the loss on the higher classes :—

Passenger traffic.

	1ST CLASS.		2ND CLASS.		3RD CLASS.	
	No. (millions).	Amount (Rs. lakhs)	No. (millions).	Amount (Rs. lakhs)	No. (millions).	Amount (Rs. lakhs).
1920-21	14	20	90	37	38	53
1921-22	15	21	88	37	35	52
1922-23	13	20	65	28	30	44

	THIRD CLASS.		TOTAL.	
	No. (millions).	Amount (Rs. lakhs).	No. (millions).	Amount (Rs. lakhs).
1920-21	64.0	4.77	68.9	5.92
1921-22	69.3	4.78	73.8	5.88
1922-23	70.9	5.16	74.8	6.08

200. The increase in gross earnings is almost entirely due to the receipts from goods traffic. This is seen from the following statement :—

Gross earnings (Rs. lakhs).

	1921-22.	1922-23.
Coaching	6,05	6,10
Goods	6,82	7,60
Other receipts	65	77
Total ...	13,02	14,47

The increase in goods traffic receipts is partially due to the larger exports of wheat owing to the removal of the embargo on the export of wheat. The figures for the total wheat traffic to Karachi and the receipts therefrom for the last six years are eloquent :—

Wheat traffic to Karachi.

Year.	Tons (millions.)	Receipts (Rs. lakhs).
1917-18	1.17	1,74
1918-19 ... ..	.52	69
1919-20 ... ..	.09	11
1920-21 ... ..	.48	72
1921-22 ... ..	.06	10
1922-23 ... ..	.29	53

July and August are the best months for export, as then the Punjab wheat crop is reaped, and the American and Canadian crops have not yet come in the Liverpool market. As the embargo on export was only removed in September 1922 the receipts for the year 1922-23 were prevented from attaining the dimensions which they would have otherwise done. Increased rates have however, also accounted for the increased receipts as is shown from the accompanying table —

		1921-22		1922-23.	
		Tons (million)	Rs. (lakhs).	Tons (million).	Rs. (lakhs)
Cotton, Raw	...	·13	84	·15	39
Wheat and wheat flour.		·66	61	90	101
Other grains	...	1·13	84	91	83
Iron and Steel pro- ducts		(0)	17	·12	27
Rape and Mustard		·16	20	·19	29
Salt	...	·17	14	·19	13
Sugar, gur, etc.	...	·83	52	·30	43
All other articles	...	2 00	296	2 87	383
Total	...	5·67	581	5 66	723

Owing to the fall in the price of wheat many of those people who formerly consumed other grains were this year able to afford the luxury of wheat. Consequently the amount of other grains diminished though the increased rates prevented any appreciable diminution in receipts under that head.

APPENDIX

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Reference is made to para 2, 3 of the Report.

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